4.0 REVISED PAGES TO THE DRAFT EIR

In accordance with section 15132 of the State CEQA Guidelines, this section presents the insignificant modifications that are made to the Draft EIR to clarify or amplify its text in response to comments. Such changes are therefore consistent with the provisions of section 15088.5(b) of the State CEQA Guidelines. Deletions to text are shown by strike-through and additions to text are shown by underline.

EXECUTIVE SUMMARY

This section of the EIR contains a summary of the EIR. All changes to this section are reflected below.

DESCRIPTION OF PROPOSED PROJECT

The following text was modified on page ES-3 to identify that the previous WorldCom Development Plan/Coastal Development Permit conditions of approval enforced by the County of San Luis Obispo will apply to the proposed project.

In 2001, WorldCom, under a Coastal Development Permit issued by the County of San Luis Obispo and tideland lease approval by the State Lands Commission, installed an additional five drill pipes extending from the Sandspit Beach parking lot westward to a terminus offshore.

COMPARISON OF PROPOSED PROJECT AND ALTERNATIVES

The following revision to Table ES-1, Summary of Environmental Impacts for the Proposed Project, page ES-9, has been added to address the less than significant, adverse impact of project construction on the introduction and potential spread of noxious weeds to agricultural lands and revisions to one of the air emission mitigation measures.

Table ES-1. Summary of Environmental Impacts for the Proposed Project

Impact Class I = Significant adverse impact that remains significant after mitigation. Only Class I impacts have significant residual impacts.
II = Significant adverse impact that can be eliminated or reduced below an issue's significance criteria.
III = Adverse impact that does not meet or exceed an issue's significance criteria.
IV = Beneficial impact.

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
Section 4.2 - Air Quality			
AQ-1	Vessels used for construction and decommissioning could temporarily exceed daily emission thresholds for ozone precursors within the APCD.	II	**MM AQ-1a.** ~~Use low-emission fuel in all smaller diesel-powered vessels and in all construction equipment~~. Implementation of NOx control measures and CBACT. **MM AQ-1b.** Contribute, as determined by the APCD, to an off-site emission reduction program within the APCD jurisdiction.
AQ-2	The Proposed Project would produce greenhouse gas emissions and contribute to climate change.	II	**MM AQ-2.** The Applicant shall ~~participate in a Carbon Offsets Program and will~~ purchase carbon offsets equivalent to the projected project's GHG emissions to achieve a net zero increase in GHG emissions during the construction phase.
Section 4.3 - Biological Resources			
TERBIO-1	Impacts to migratory birds and raptors	II	**Implement 1990 County Conditions of Approval, and** **TERBIO-1a.** Avoidance of nesting period or, **TERBIO-1b.** If MM TERBIO-1a is infeasible, complete pre-construction nesting bird surveys.
TERBIO-2	Impacts to terrestrial sensitive species	II	**Implement 1990 County Conditions of Approval, and** **TERBIO-2a-k.** Conduct worker orientation, biological monitoring during construction, exclusionary fencing, limits on night-time activities, obtain USFWS Incidental Take Permit or Habitat Conservation Plan or other appropriate USFWS authorization, approval from State Parks on Mitigation Plan, pre-activity surveys for special-status species along cable route and Los Osos Creek crossings, and prohibit pets on-site during Project construction.

Table ES-1. (Continued)

Impact No.	Impact	Impact Class	Recommended Mitigation Measures
TERBIO-3	Degradation of natural habitats	II	**Implement 1990 County Conditions of Approval, and** **TERBIO-3a-c.** Avoid unnecessary impacts to oak trees, use certified arborist for all pruning of oak trees, develop Trail Enhancement Plan, and install and monitor long-term erosion control devices. TERBIO-3d. Pre-construction Equipment Washing, Right-of Way Survey and Weed Control Measures to avoid spread of invasive, non-native plant species.
MARBIO-1	Potential rock substrate disturbance during pre-lay grapnel survey	II	**MARBIO-1:** Prepare and implement pre-survey map for rock avoidance.
MARBIO-2	Impacts to rock substrate during vessel anchoring and nearshore cable placement	II	**MARBIO-2a:** Prepare and implement anchoring plan. **MARBIO-2b:** Cable placement area clearance procedures.
MARBIO-3	Damage to rock substrate during cable laying	II	**MARBIO-3:** Post-lay ROV survey, report and compensation determination.
MARBIO-4	Marine mammal-vessel interaction during cable laying	II	**MARBIO-4:** Marine Wildlife Contingency Plan
MARBIO-5	Incidental and accidental vessel discharges	II	**MARBIO-5a:** Zero Discharge Policy. **MARBIO-5b:** Spill Response and Recovery Plan.
MARBIO-6	Damage to rock substrate during maintenance and repairs	II	**MARBIO-6:** Pre-planning for cable recovery and repair operations.
Section 4.7 - Hydrology and Water Quality			
WQ-1	Erosion and sedimentation impacts during construction activities	II	**WQ-1:** Prepare and implement an erosion and sedimentation control plan, and a storm water pollution prevention plan. Implement **MM TERBIO-2e** Spill Prevention and Contingency Plan, and **MM TERBIO-3c** Erosion control monitoring.
WQ-2	Effects of a petroleum discharge during construction activities	II	**WQ-2:** Prepare spill response and recovery plan.
WQ-3	Discharge of contaminated water during pipe preparation activities	II	**WQ-3:** Water quality testing and reporting for pipe flushing water.

SECTION 1.0: INTRODUCTION

SECTION 1.4: PERMITS, APPROVALS AND REGULATORY REQUIREMENTS

The following text was modified on page 1-6 to include the previous WorldCom Development Plan/Coastal Development Permit conditions of approval:

- Consultation and compliance regarding the existing land use permit previously issued by the San Luis Obispo County Department of Planning and Building in 1991 for the construction of the terrestrial cable conduit system, Sandspit Beach parking lot landing site, and installation of cables within the terrestrial cable conduit system, and applicable conditions of approval issued by the County of San Luis Obispo for the previous WorldCom Development Plan/Coastal Development Permit (D970257D); and

- Streambed Alteration Agreement issued by the California Department of Fish and Game pursuant to section 1602 of the California Fish and Game Code (if required for stream crossings along terrestrial access routes).

SECTION 2.0: PROJECT DESCRIPTION

The following text was modified in Table 2-3 to clarify the access routes proposed by AT&T.

Table 2-3. Access Routes to Manholes within the Terrestrial Segment (West to East from State Park to SLO Cable Station)

Manhole Numbers	Access Route(s)	Notes/Special Considerations
109F through 107 1/2F (3 total manholes)	Pecho Valley Road and Access Road to the Sandspit Beach parking lot	These are hard surface public roads that offer all weather access to manholes.
107F through 98F	Hazard Canyon Road (within the Montaña de Oro State Park) connects to Pecho Valley Road (see Figure 2-5a)	This road is an improved gravel road on park property. Hazard Canyon Road is accessible to vehicles eastward to the horse camp area. Sand/dirt horse trails are approximately 15 feet wide. This route is accessible year around.

Table 2-3. (Continued)

Manhole Numbers	Access Route(s)	Notes/Special Considerations
96F to 89F	Rim Trail (within the Montaña de Oro State Park)	Access is a horse trail that consists of intermittent hard pack clay/shale and sand. The access between manholes 96F and 92 is restricted to smaller equipment only, as discussed below, due to sensitive habitat and narrow trail width (3 to 5 feet [0.9 to 1.5 m] in some areas). Access is year-around although the project plan is to access this portion of the route from Silva's access road so that pulling can occur down hill (see Silva access road discussion below). There are some portions on Rim Trail that have eroded and will need repair (see below).
92 to ~~55~~ 69 1/2	Silva Access Road	This is a private access road that exists on the Silva property. It begins at Clark Valley Road (a hard surface public road that offers all weather access to several of the other access roads and manholes) and is aligned just south of Los Osos Creek, crossing the creek in two places. The road is passable year-around but during wet weather four-wheel drive vehicles are required as it can get muddy. No improvements are necessary on the Silva Access Road.
64 ~~92~~to 55	Boam ~~Swift~~ Access Road	~~Los Osos Creek, which will not be crossed, is between manholes 64 and 69 ½.~~ Access to manhole 64 ½ on the east side of Los Osos Creek is from the Boam access road which is a private gravel/dirt road that begins at Clark Valley Road ~~and is used to access manholes 64 to 55 from just east of Los Osos Creek to near Clark Valley Road~~. No improvements are necessary on the Boam ~~Silva~~ Access Road.
51 to ~~42~~ 45	California Coast Properties Access Road	A private improved gravel road that begins at Clark Valley Road and terminates at manhole 51. Manholes 47 ½ and 45 are accessed via a combination of the California Coast Properties Access road and a field road along the easement. ~~is in very good condition.~~

1 **Table 2-3. (Continued)**

Manhole Numbers	Access Route(s)	Notes/Special Considerations
		No improvement to the California Coast Properties Access Road is necessary. ~~just east of manhole 45 is an impasse. Access on the east side of this impasse is from the Beecham Access Road, a private gravel/dirt road that begins at Clark Valley Road.~~ ~~In wet weather this access is avoided so as to avoid damage to the field. In these instances, the Swift Access Road can be used. No improvement to this road is necessary.~~
~~39~~ 42 to 32 ½	Beecham ~~Swift~~ Access Road and Swift Access Road	Access to manhole 42 is from the Beecham Access Road. This road is a private gravel/field road that begins at Clark Valley Road and extends up to and along the ridge from manhole 42 to manhole 36 ½. Access east of manhole 32 ½ utilizes an existing dirt field road on Swift's property along the easement. ~~These two private roads begin on crossing a pasture. This route would only be used during dry weather. The east road is an all weather gravel road.~~ No improvements to the Beecham Access Road are necessary. Some erosion repair to the Swift Access Road may be necessary at the completion of the cable installation.
~~32~~ 30 ½ to 25	Jorgensen ~~Spradlin~~ Access Road	This is a private gravel/dirt road that begins at Los Osos Valley Road (a hard surface public road that offers all weather access to several of the other access roads and manholes) and is the primary access to homes on the property. No improvement to this road is necessary.
28 ½ to 19	Jorgensen Access Road and/or Twisselman Access Road	Both are private gravel/dirt roads, with Jorgensen beginning at Los Osos Valley Road and Twisselman beginning at Prefumo Canyon Road. No improvements to either road are necessary.

SECTION 4.0: ENVIRONMENTAL ANALYSIS

INTRODUCTION TO ENVIRONMENTAL ANALYSIS

The text below is added to the discussion at the bottom of page 4.0-1 relating to Agricultural Resources in response to a concern regarding the introduction and spread of weed species to agricultural lands in San Luis Obispo County.

Portions of the cable alignment pass through lands with land use designations of Agriculture and Rural Lands. Mark Lee, Agricultural Biologist and invasive plant specialist with the County of San Luis Obispo Department of Agriculture, was consulted in response to a comment on the DEIR regarding the potential of project construction equipment introducing weed species to the project area and impacting agricultural operations, specifically grazing. Based upon communications with Mr. Lee, it was determined that the project has the potential to result in an adverse impact to agricultural land as a result of the introduction and spread of non-native species that may be dispersed by construction equipment, particularly equipment that may originate from outside of San Luis Obispo County. Two examples of problematic plants that may be introduced that are harmful to grazing are medusa's head (*Taeniatherum caput-medusae*) and jointed goat grass (Aegilops triuncialis). However, because of the existing presence of non-native and invasive species within the project areas, the introduction of weed seeds into the project area from construction equipment is not anticipated to result in a significant impact to grazing land.

The County Department of Agriculture and County of San Luis Obispo Department of Planning and Building supports implementation of MM TERBIO-3d to prevent the spread of invasive, non-native species from construction projects including the proposed project.

SECTION 4.2: AIR QUALITY

The following text was modified on pages 4.2-15 through 4.2-18 to incorporate the request made by the County of San Luis Obispo Air Pollution Control District to calculate offshore criteria air emissions from shore to the Carl Moyer Boundary (approximately 39 miles from shore) rather than from shore to the continental shelf (approximately 55 miles from shore).

Impact AQ-1: Construction and Decommissioning Emissions

Vessels used for construction and decommissioning could temporarily exceed daily emission thresholds for ozone precursors within the APCD. (Potentially Significant, Class II)

The maximum daily NO_X emissions would occur during near-shore cable installation. This phase of the Project combined with worker commuting will create ~~2,140~~ 2,759.7 pounds ~~(971 kg)~~ (1,252.2 kg) of NO_X per day (lbs/day), which exceeds the APCD regional significance threshold of 185 pounds (84 kg) per day. Peak daily emissions assume near shore cable installation, shore-end construction, and land based cable pulling will happen simultaneously. During construction, peak daily emissions will be 2,846.5 pounds of NO_X, 107.8 pounds of ROC, 77.6 pounds of PM_{10}, 590.3 pounds of CO and 541.6 pounds of SO_2. Offshore cable installation and cable retroburial will also result in NO_X emissions, which will exceed the daily APCD significance threshold. The total duration of activities with emissions above the daily NO_X emissions significance threshold is conservatively estimated to be six days. Forecasted unmitigated daily emissions of ROC, CO, PM_{10}, and SO_2 are less than the APCD thresholds. Mitigation to reduce or offset NO_X emissions is warranted based on the exceedance of the APCD threshold. Decommissioning and cable removal activities have not been identified in detail, but would involve equipment similar to that used for Project construction.

Table 4.2-5. Daily Emissions from Construction

Activity	NO_X (pounds/day)	ROC (pounds/day)	PM_{10} (pounds/day)	CO (pounds/day)	SO_2 (pounds/day)
Pipe Preparation	135.3	8.1	3.6	44.4	24.5
Pre-Lay Grapnel Run	~~12.5~~ 1670.2	~~0.78~~ 105.1	~~0.34~~ 5.2	~~4.4~~ 590.3	~~2.2~~ 299.9
Offshore Cable Installation*	~~1601.7~~ 2017.4	~~107.8~~ 94.0	~~43.7~~ 53.2	590.3	~~284.9~~ 374.9
Near-shore Cable Installation	~~2140.4~~ 2759.7	~~72.1~~ 70.1	~~55.3~~ 69.6	~~484.2~~ 451.4	~~408.3~~ 541.6
Near-shore Cable Retro-burial	~~127.9~~ 0.0	~~7.9~~ 0.0	~~3.5~~ 0.0	~~44.4~~ 0.0	~~23.0~~ 0.0
Cable Retro-burial	~~1201.3~~ 1601.7	~~80.9~~ 107.8	~~32.8~~ 43.7	~~442.7~~ 590.3	~~213.7~~ 284.9
Shore End Construction	21.1	3.6	1.5	16.2	0.017
Land-Based Cable Pulling	65.7	24.5	6.5	66.5	0.058
Worker Commuting	0.063	~~24.5~~ 0.75	0.048	6.4	--
Total Peak Daily Emissions	~~2227~~ 2846.689**	~~63.3~~ 108.55	~~115.8~~ 77.744**	~~556.9~~ 596.7	~~408.4~~ 542

Table 4.2-5. Daily (Continued)

Activity	NO_X (pounds/day)	ROC (pounds/day)	PM_{10} (pounds/day)	CO (pounds/day)	SO_2 (pounds/day)
APCD Daily Thresholds	185	185	None	None	None

Notes:

* Emissions presented only include~~s~~ activities onshore or within ~~State waters~~ the Carl Moyer Boundary, approximately 39 miles from shore.

Not all activities occur concurrently. Peak emissions assume that the following activities occur simultaneously: ~~assumed to include the following worst-case activities~~: Near-shore cable installation, shore-end construction, land-based cable pulling and worker commuting.

Worker commuting is assumed to occur during each operation.

** Commute emissions are considered 3 times; for each of the 3 activities occurring simultaneously previously mentioned.

Source: Jones and Stokes 2008.

Table 4.2-6 shows estimated unmitigated total regional emissions generated by the Project. Appendix E includes emission calculation spreadsheets and emission factors used to calculate total Project emissions. Equipment included in the regional emission estimate includes marine vessels and support boats, on-land construction equipment, on-highway trucks, and worker commute vehicles. The uncontrolled emission estimates for marine vessels are based on pre-2000 emission factors and assume that none of the offshore equipment uses EPA Tier 2-compliant engines. The total NO_X emissions within ~~State waters~~ the Carl Moyer Boundary would be ~~5 tons (5,080 kg)~~ 9.8 tons (8,890.4 kg) which exceeds the APCD regional significance threshold for total project emissions during a single calendar quarter of 2.5 tons by ~~2.5 tons (2.27 metric tons)~~ 7.3 tons. Emissions exceeding the 2.5 ton threshold, but are less than 6 tons, require implementation of Best Available Control Technology (CBACT). The threshold of significance which requires the purchase of offsets is set by the APCD at 6 tons for NO_X and ROC. Forecasted unmitigated total emissions of ROC, CO, PM_{10}, and SO_2 are less than the applicable APCD CEQA thresholds. Mitigation or offsets to reduce NO_X emissions is warranted based on the exceedance of the APCD threshold.

1 **Table 4.2-6. Total Emissions from Construction**

Activity	NO_x (tons)	ROC (tons)	PM_{10} (tons)	CO (tons)	SO_2 (tons)
Pipe Preparation	0.20	0.012	0.0055	0.067	0.037
Pre-Lay Grapnel Run	0.012	0.0008	0.0003	0.0044	0.0022
Offshore Cable Installation*	0.80	0.054	0.022	0.30	0.14
Near-shore Cable Installation	1.91	0.058	0.049	0.405	0.367
Near-shore Cable Retro-burial	0.26	0.016	0.00069	0.089	0.046
Cable Retro-burial	6.1	0.41	0.17	2.3	1.1
Shore End Construction	0.041	0.0082	0.0029	0.037	0.00003
Land-Based Cable Pulling	0.82	0.31	0.081	0.83	0.00073
Worker Commuting	0.025	0.03	0.0019	0.26	--
Total Emissions	4.97	0.55	0.19	2.32	0.76
APCD Quarterly Thresholds	2.5	2.5	2.5	NA	NA

Notes:

Ταβλε 2.□ □. Only includes activities within State waters or onshore.

Source: Jones and Stokes 2008.

Table 4.2-6. Total Emissions from Construction

Activity	NO_X (tons)	ROC (tons)	PM_{10} (tons)	CO (tons)	SO_2 (tons)
Pipe Preparation	0.20	0.012	0.0055	0.067	0.037
Pre-Lay Grapnel Run	1.25	0.079	0.0339	0.44	0.225
Offshore Cable Installation*	1.50	0.07	0.04	0.40	0.30
Near-shore Cable Installation	1.98	0.063	0.051	0.429	0.379
Near-shore Cable Retro-burial	0.0	0.0	0.0	0.0	0.0
Cable Retro-burial	4.0	0.27	0.11	1.5	0.7
Shore End Construction	0.041	0.0082	0.0029	0.037	0.00003
Land-Based Cable Pulling	0.82	0.31	0.081	0.83	0.00073
Worker Commuting	0.025	0.03	0.0019	0.26	--
Total Emissions	9.8	0.84	0.33	4.0	1.6
APCD Quarterly Thresholds	2.5	2.5	2.5	NA	NA
APCD Thresholds Requiring Offsets	6.0	6.0	N/A	N/A	N/A

Notes:

- Emissions presented only includes ~~activities~~ emissions within ~~State waters~~ the Carl Moyer Boundary or onshore.
- Worker Commuting is assumed to occur with each activity.

Source: Jones and Stokes 2008.

The terrestrial segment includes an existing conduit system (constructed in 1990) that starts at a manhole (installed in 2001) in the Sandspit Beach parking lot of Montaña de Oro State Park and then traverses inland for a distance of approximately 10.5 miles (16.9 km) to the AT&T San Luis Obispo Cable Station, which was constructed in the 1960s. Beyond the Montaña de Oro State Park boundaries, the conduit system exists entirely within private easements held by AT&T, with the exception of two road crossings at Pecho Valley Road and Clark's Gap Road. This route is commonly referred to as the "ridge" conduit system because it is located along the ridge of the hills just south of Los Osos Valley Road. The terrestrial segment activities include pulling a fiber optic cable and a power cable through the existing conduit system and installing a new ground bed. This segment may also include repairing sections of the conduit system, as necessary, to allow for installation of the new cable. In addition, some minor erosion will be repaired along the route. Other than these activities, no construction is anticipated for this segment of the project.

Mitigation Measures for Impact AQ-1: Construction and Decommissioning Emissions

MM AQ-1a. **NOx Control Measures and CBACT.** The proposed project shall implement Best Available Control Technology for all emissions exceeding 2.5 tons per quarter. These measures include but are not limited to the following standard construction equipment mitigation measures:

- Maintain all construction equipment in proper tune according to manufacturer's specifications.
- Fuel all off-road and portable diesel powered equipment, with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road).
- Maximize to the extent feasible, the use of diesel construction equipment meeting the ARB's Tier 2 or newer certification standard for off-road heavy-duty diesel engines.
- Maximize to the extent feasible, the use of on-road heavy duty equipment and trucks that meet the ARB's 2007 or newer certification standard for on road heavy duty diesel engines.
- All on and off-road diesel equipment shall not be allowed to idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit

The following additional measures shall be utilized to address the requirement for CBACT

- Install diesel oxidation catalysts (DOC), catalyzed diesel particulate filters (CDPF) or other District approved emission reduction retrofit devices.
- Low-Emission Fuel. Low-sulfur diesel fuel shall be used in all smaller diesel-powered vessels and in all construction equipment.

MM AQ-1b. **Offsite NOx Mitigation.** As determined by the San Luis Obispo County APCD, AT&T shall financially contribute to an off-site emission reduction program within the APCD jurisdiction <u>for emissions exceeding 6 tons per quarter</u>. The amount of the contribution shall be agreed upon by the APCD taking into account the limited duration of cable-laying activities. A description of the emission reduction program and a copy of a receipt for funds committed to the program shall be submitted to the APCD at least two months prior to operation of the cable.

Rationale for Mitigation

Use of on-road diesel fuel designed for motor vehicles would ensure that combustion-related diesel particulate matter emissions from all construction equipment are reduced to the extent feasible. The CARB currently requires low-sulfur fuel (500 ppm sulfur content) in construction equipment and, in many locations, ultra-low sulfur diesel fuel (15 ppm sulfur content) is already available. In advance of CARB rulemaking, use of on-road diesel fuel in smaller marine vessels (i.e., support boats) would be feasible and appropriate. The cable-laying vessel would operate on heavier distillate and residual fuel oils, which are not available with reduced sulfur content.

Odors from construction equipment diesel exhaust would also be reduced with the recommended use of low-sulfur fuel. No substances used or activities involved with the Project are expected to have the capability to produce offensive odors.

<u>Total construction related NOx emissions are estimated to be 9.8 tons. As this exceeds the 6 ton per quarter threshold established by the APCD, the offset of 3.8 tons of NOx will be required.</u> Significant emissions <u>greater than 6 tons</u> of NOx within the APCD ~~may~~ <u>will</u> be mitigated with contributions to previously established programs administered by the APCD. Air quality management plans for attainment partially depend on these programs, which provide emission reductions from sources that are not Project-related and traditionally are not regulated. For example, contributions could be used to fund the Carl Moyer Program (for upgrading or replacing existing engines in agricultural operations or other local marine operations), depending on the discretion of the APCD. The APCD would identify the level of funding necessary to address the impact in a manner consistent with the applicable attainment plan, taking into account the limited duration of cable-laying activities.

The following text was modified on pages 4.2-20 through 4.2-21 to incorporate changes made to offshore construction activity on the continental shelf.

Because the emission sources associated with the proposed Project are internal combustion engines, the predominant GHG emitted by the Project would be carbon dioxide (CO_2). As a result, GHG emissions for the Project are calculated based on estimated fuel usage. Based on a total fuel consumption of ~~342,776.6~~ 345,231.0 gallons (1.3068 million liters), the Project will produce a total of ~~3,842.8~~ 3,871.2 tons (3.512 million kg) of CO_2. These emissions would occur only during the brief construction period; however, these emissions will result in a net increase in the production of GHG. Such impacts are potentially significant therefore mitigation measures to reduce these impacts are proposed. Emission calculations are included in Table 4.2-8 and in Appendix C of the FEIR. Following construction, the proposed Project would not produce any measurable operational GHG emissions except for those associated with minor maintenance operations which are already occurring as part of the ongoing operations associated with the existing fiber optic cable system.

According to a recent white paper by the Association of Environmental Professionals, "an individual project does not generate enough GHG emissions to significantly influence global climate change. Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHG emissions." The temporary GHG emissions generated by the proposed construction project would be an inconsequentially small fraction of the worldwide GHG emissions during the brief construction period.

Table 4.2-8. Construction Greenhouse Gas Emissions
(Tons, Total Project)

Project Component		Project Total Gallons of Fuel	Project Total CO_2 Emissions in Tons
San Luis Obispo Cable Landing			
Terrestrial	Land based	6,957.5	77.9
	Shore end	312.6	3.5
Construction on continental shelf	Marine support vessels	4,869.3	54.5
	Cable lay vessel	~~109,001.0~~ 111,455.36	~~1,219.9~~ 1248.3
Deep Water Cable Laying			
	Cable lay vessel	178,500.0	1,997.8

Table 4.2-8. (Continued)

Project Component		Project Total Gallons of Fuel	Project Total CO_2 Emissions in Tons
Hawaii Cable Landing			
Terrestrial	Land based	434.8	7.8
	Shore end	312.6	3.5
Construction on continental shelf	Marine support vessels	1,826.0	20.4
	Cable lay vessel	40,875.4	4,57.5
Total Project		~~342,776.6~~ 345,231.0	~~3,842.8~~ 3,871.2

Source: Jones and Stokes 2008.

MM AQ-2. GHG Emissions Offset Program. ~~The Applicant shall participate in a Carbon Offsets Program and will purchase carbon offsets equivalent to the projected project's GHG emissions to achieve a net zero increase in GHG emissions during the construction phase.~~ Prior to the start of construction, the applicant shall purchase carbon offsets from the California Climate Action Registry (CCAR) or the San Luis Obispo County Air Pollution Control District (APCD). The applicant may also use offsets or credits from any source that is approved by the Executive Officer and is consistent with the policies and guidelines of the California Global Warming Solutions Act of 2006 (AB 32). Within 60 days of completing construction, the applicant shall submit a report for Executive Officer review and approval that identifies all construction-related emissions and the offsets that were purchased from approved programs that results in a zero net increase in air emissions from project construction.

The following text was modified on page 4.2-23 to incorporate changes made to offshore construction activity on the continental shelf.

It is possible that GHG emissions associated with construction of the Project, when combined with emissions throughout the Project area, might incrementally contribute to climate change. Locally, there are other industrial, commercial and residential projects in the Project area that could contribute to cumulative impacts. Based upon 9,875 estimated total annual ocean-going vessel visits to California ports (CARB 2005), the additional vessel visits involved in this Project would represent a small percentage increase. As noted in the CARB (2005) analysis, these ocean going vessels cumulatively result in an annual contribution of 3,012,020.15 tons of CO_2 emissions in California Coastal Waters (CCW). The proposed Project would result in total CO_2

emissions of ~~3,842.8~~ 3,871.2 tons, which represents less than a quarter of one percent of the total CO_2 emissions from ocean going vessels in CCW.

SECTION 4.3: BIOLOGICAL RESOURCES

The following text was modified on page 4.3-97 to include "appropriate authorization" within Mitigation Measure TERBIO-2f, on page 4.3-99 to further clarify Mitigation Measure TERBIO-2j, and on page 4.3-117 to include the development of a Trail Enhancement Plan as part of Mitigation Measure TERBIO-3c and TERBIO-3d to develop a program to avoid the spread of invasive, non-native species. Lastly, Table 4.3-12 on page 4.3-125 was updated to reflect the modifications of Mitigation Measure TERBIO-2f:

MM TERBIO-2f. **USFWS Authorization.** Prior to installation of the terrestrial cable route, AT&T shall provide an approved USFWS Incidental Take Permit and Habitat Conservation Plan or other appropriate authorization that identifies the conservation measures that AT&T agrees to implement to avoid and/or minimize impacts to Morro shoulderband snail during Project operations. ~~The~~ If an Incidental Take Permit/Habitat Conservation Plan is required, it will document methods of relocation of Morro shoulderband snails from work areas and mitigating temporary impacts to Morro shoulderband snail critical habitat elements (i.e., coastal dune scrub). This shall include a letter of agreement from State Parks approving the final provisions of the proposed Morro shoulderband snail mitigation site within Montaña de Oro State Park as illustrated on Figure 4.3-1. All measures of ~~the~~ any Habitat Conservation Plan or other appropriate USFWS authorization specific to the Project shall become Conditions of Approval.

MM TERBIO-2j. **Los Osos Creek Pre-Activity Surveys.** Prior to ~~each required~~ crossing of Los Osos Creek and associated drainages by Project vehicles and equipment each day, a CDFG-approved biologist shall conduct a focused pre-activity survey of the proposed crossing(s) including a buffer of approximately 50 feet (15 m) upstream and downstream of the crossing(s) to determine presence/absence of aquatic and semi-aquatic special-status species including but not limited to steelhead trout, California red-legged frog, southwestern

pond turtle, and two-striped garter snake. All special-status species within and/or immediately adjacent to the crossing(s) shall be relocated to suitable habitat located outside the roadway by a qualified biologist. The frequency of special-status species surveys within Los Osos Creek should be increased at the discretion of the approved biologist to account for increased special-status species activity and/or occurrences. Exact procedures and protocols for relocation of species of concern (e.g., southwestern pond turtle, two-striped garter snake, etc.) shall be agreed to during pre-Project consultation with CDFG. At no time shall any federally-listed species (e.g., steelhead trout, California red-legged frog, etc.) be relocated from the crossings without prior authorization from the NMFS and/or USFWS.

MM TERBIO-3c. **Trail Enhancement Plan and Erosion Control Monitoring.** To ensure that the Rim Trail is remediated to a permanent, sustainable condition as required by CDPR, AT&T shall develop a Trail Enhancement Plan focused on repair and restoration of the trail to current CDPR standards. The Trail Enhancement Plan would be prepared by AT&T for review and approval by CDPR prior to implementation of the project's terrestrial component. To further ensure that all repaired erosion features along the Rim Trail and any newly created erosion areas due to Project implementation are properly stabilized utilizing the erosion and sedimentation control measures outlined above, all repaired areas shall be monitored during the subsequent rainy season. Specifically, the following measures shall be included in the Trail Enhancement Plan and implemented accordingly following project completion:

- All erosion repair areas (both minor and major) of the terrestrial cable route right-of-way shall be identified and numbered accordingly and illustrated on a site plan for easy reference;

- The stabilized erosion features shall be monitored for overall effectiveness during three significant storm events (>1-inch [2.5 cm] rain in a 24-hour period) during the pending subsequent season;

- Any erosion control deficiencies including, but not limited to rills, gullies, waterbar(s) failure, and localized slope failures shall be identified and appropriate corrective actions using the measures outlined above shall be discussed in a monitoring report;

- Copies of the monitoring report shall be provided to the appropriate regulatory agencies, landowner representatives and AT&T within 48 hours of erosion feature documentation;

- Recommended measures within the report shall then be implemented within 72 hours by an AT&T on-call contractor; and,

- Any areas requiring repair will be monitored using these same protocols the following rainy season.

MM TERBIO-3d **Pre-construction Equipment Washing, Right-of Way Survey and Weed Control Measures:** Any construction equipment to be used on the project originating from locations outside of San Luis Obispo County shall be power washed prior to transport to the County to remove any plant material that could be transferred to soils in the project construction area. Prior to construction, the applicant shall coordinate with the San Luis Obispo County Agricultural Commissioner's Office to conduct a pre-construction right-of-way site evaluation for noxious weeds. Based upon the survey, the applicant shall prepare a map showing areas of noxious weed infestation. The applicant shall implement equipment wash stations and other pertinent noxious weed control measures as determined appropriate and necessary based upon the above map and further coordination with the San Luis Obispo County Agricultural Commissioner's Office.

Table 4.3-12. (Continued)

Impact	Mitigation Measures
TERBIO-2: Impacts to terrestrial sensitive species	**Implement 1990 County Conditions of Approval, and** **TERBIO-2a-k.** Conduct worker orientation, biological monitoring during construction, exclusionary fencing, limits on night-time activities, obtain USFWS Incidental Take Permit or Habitat Conservation Plan or other appropriate USFWS authorization, approval from State Parks on Mitigation Plan, pre-activity surveys for special-status species along cable route and Los Osos Creek crossings, and prohibit pets on-site during Project construction.
TERBIO-3: Degradation of natural habitats	**Implement 1990 County Conditions of Approval, and** **TERBIO-3a-c.** Avoid unnecessary impacts to oak trees, use certified arborist for all pruning of oak trees, install and monitor long-term erosion control devices. TERBIO-3d to address to potential spread of invasive, non-native plan species.
MARBIO-1: Potential rock substrate disturbance during pre-lay grapnel survey	**MARBIO-1:** Prepare and implement pre-survey map for rock avoidance.
MARBIO-2: Impacts to rock substrate during vessel anchoring and nearshore cable placement	**MARBIO-2a:** Prepare and implement anchoring plan. **MARBIO-2b:** Cable placement area clearance procedures.
MARBIO-3: Damage to rock substrate during cable laying	**MARBIO-3:** Post-lay ROV Survey, report and compensation determination.
MARBIO-4: Marine mammal-vessel interaction during cable laying	**MARBIO-4:** Marine Wildlife Contingency Plan
MARBIO-5: Incidental and accidental vessel discharges	**MARBIO-5a:** Zero Discharge Policy. **MARBIO-5b:** Spill Response and Recovery Plan.
MARBIO-6: Damage to rock substrate during maintenance and repairs	**MARBIO-6:** Pre-planning for cable recovery and repair operations.

The text below on page 4.3-121 of the Biological Resources Section was modified in response to additional information provided by the project applicant in January 2009 regarding the use of buoys for the placement of cable.

The cable lay vessel will be located approximately 330 feet (100 m) offshore of the conduit and will ~~place the cable that is to be pulled into the conduit onto the seafloor prior to~~ release the buoyed cable into the water. The buoys will be removed and the cable will be inserted ~~ion of the cable~~ into the excavated conduit by divers. While sedimentary substrate characterizes the nearshore seafloor habitats at and around the conduit, rocky substrate has been recorded approximately 0.4 mile (0.6 km) offshore (west) of the conduit. Placing the cable onto the substrate could result in significant impacts to the habitat and the associated biota.

Mitigation Measures for MARBIO-2: Potential Impacts to Rock Substrate During Vessel Anchoring and Nearshore Cable Placement.

MM MARBIO-2a **Anchor Plan.** Prior to anchoring any vessels, prepare, and have CSLC approve, a detailed anchor plan that shows all proposed anchor locations. Complete a side scan sonar or diver survey within a 100 feet- (32 m-) diameter area around all proposed anchor locations and within a 20 feet- (6 m-) wide corridor along all proposed anchor line alignments within those areas that have not been similarly surveyed within the past year or where rocky habitat has been previously recorded.

MM MARBIO-2b **Cable Placement Area Clearance.** Minimize the area of seafloor that is affected during inshore cable placement and avoid all previously-documented rocky seafloor habitats by at least 50 feet (15 m). ~~To assure that no nearshore rocky substrate is affected, the shore-end cable shall be placed onto sedimentary seafloor. Prior to insertion of the cable, CSLC shall be provided with a figure that depicts seafloor habitat types and bathymetry and the location on the seafloor that the shore-end cable will be placed.~~

The text below on page 4.3-122 of the Biological Resources Section was modified to reflect communications with California Coastal Commission staff relating to post-installation hard bottom survey requirements for previously completed fiber optic cable projects in response to comments on the DEIR as provided by Allen Matkins representing AT&T.

MM MARBIO-3: Post-Lay ROV Survey, Report, and Compensation Determination. ~~A CSLC-approved marine biologist shall be onboard the post-lay ROV survey vessel to observe and record the effects of~~ Good quality video footage of the seafloor taken by the ROV during cable lay operations within the "subcropping rock" and "outcropping rock" areas specified in Table 4.6-1 (see below) and within a 100 m-long buffer zone inshore and offshore of each segment will be provided to a California State Lands Commission- (CSLC-) approved marine biologist for review and assessment. ~~on the seafloor substrates and biota in water depths of from 100 to 6,000 feet (31 and 1,830 m)~~. The CSLC-approved marine biologist shall prepare ~~A~~ a technical report that includes information on the area (in square meters) and estimated number and species of organisms affected in rocky habitats, ~~shall be prepared and submitted~~ and shall submit the report to the CSLC. ~~Restoration specifications shall be based on the results of that survey and specified by the CSLC.~~ The applicant shall contribute to a CSLC/CCC-approved hardbottom mitigation program proportional to impacts documented in the survey report.

Table 4.6-1. Sediments Encountered Along the Proposed Marine Cable Route

Material Type	Approximate Location (Kilometer Posts [KP])	Percent of Route Between KP 0 and KP 95
Fine-Grained (Silt/Clay)	0-3.5, 8.2-56.3, 61.2-71.2, 88.5-95.0	71.6
Coarse Grained (Sand/Gravel)	3.5-8.2, 56.3-56.8, 57.7-61.2, 71.2-72.8, 72.9-76.0, 76.7-83.3	21.1
Subcropping Rock	***72.8-72.9***	***0.1***
Outcropping Rock	***8.0-8.1, 56.8-57.7, 76.0-76.7, 83.3-88.5***	***7.2***

Source: Alcatel-Lucent 2008

The text on page 4.3-123 was modified to reflect comments regarding the proposed Marine Wildlife Contingency Plan as submitted during the DEIR public review by the National Oceanic and Atmospheric Administration.

MM MARBIO-4: **Marine Wildlife Contingency Plan.** A ~~m~~Marine ~~w~~Wildlife ~~c~~Contingency ~~p~~Plan (Plan) for the pre- and post-lay surveys and cable lay ~~and post-lay surveys~~ operations shall be prepared ~~that~~ and will include measures to reduce the chance of vessel/marine mammal interactions within the area most likely to support the most common cetaceans. That ~~p~~Plan shall include the provision for the appropriate number of NOAA Fisheries-approved marine mammal monitors to be onboard vessels that could cause an impact to marine mammals including the cable lay, cable burial and ~~support~~ transport vessel~~s~~ for complete daytime observations during marine construction activities within 50 miles (80 km) of the shore. The Plan will also include notification procedures and lists of the federal and state agency staff to be contacted in the event of a marine mammal strike. The Plan will be reviewed and approved by NOAA Fisheries prior to the initiation of in-water activities. (See MM NOI-1 for additional Plan requirements).

The text on page 4.3-124 was modified to reflect comments regarding project related vessel discharges. MM MARBIO-5a has been modified to clarify no discharges will occur within the 6000 foot water depth.

MM-MARBIO-5a: **Zero Discharge Policy.** A zero-discharge policy shall be adopted for all Project vessels; no fluids shall be discharged into the marine waters shoreward of the ~~mile-limit specified by U.S. and State of California regulations.~~ 6,000-foot water depth.

SECTION 4.5: CULTURAL RESOURCES

The following text was modified on page 4.5-21 to include the role of State Parks in the review and approval of a Cultural Resource Monitoring Plan required under Mitigation Measure CR-1a:

MM CR-1a. **Cultural Resource Monitoring Plan.** Prior to issuance of construction permits, AT&T will prepare and submit a cultural resources monitoring plan to CSLC, State Parks, and the San Luis Obispo County Department of Planning and Building/Environmental Coordinator. The plan shall be prepared by a qualified archaeologist that is approved by the CSLC, State Parks, and the county. The plan shall address, but not be limited to, monitoring, physical monitoring boundaries (e.g., 100-feet (31 m) each side of a site), site security, protocol for notifying local authorities (i.e. Sheriff, Police) should site looting and other illegal activities occur during construction.

The following text was modified on page 4.5-15 to include the result of the review of side scan sonar data in the shallow water survey area made available after preparation of the DEIR.

Table 4.5-3. Potential Marine Cultural Resources from Magnetometer Targets within Project Corridor

Easting Northing	Sidescan Sonar	Water Depth (feet/m)	Description
14814403.4E 3694301.1N	None	56/17	Unknown; in area of silty clay seafloor
14814428.1E 3694349.1N	None	56/17	Unknown; in area of silty clay seafloor
14814536.4E 3694456.1N	None	53/16	Unknown; in area of silty clay seafloor
14808740.9E 3697465.1N	Unknown; could not locate on map	266/81	Unknown
14811068.1E 3697131.1N	None	210/64	Unknown; in area of subcropping rock - may be geological in origin
14812310.5E 3696855.8N	None	171/52	Unknown; in area of subcropping rock - may be geological in origin
14814114.39E 3696493.67N	None	106/32.3	Unknown

Source: Adapted from Alcatel (2008)

Three of the magnetometer anomalies are located in water depths of 53 to 56 feet (16 to 17 m), one in approximately 106 ft (32.3 m), and one in approximately 266 feet (81 m). No information was provided on the duration or the magnitude of the anomalies. The two anomalies that were identified in water depths of 171 and 208 ft (52 and 64 m), occurred in an area of subcropping rock and are, therefore, possibly geologic in origin.

The following text was modified on page 4.5-25 as a result of the additional review of side scan sonar data in the shallow water survey area made available after public release of the DEIR.

MM CR-4a: **Detailed Resource Assessment:** Prior to the pre-lay grapnel run and cable installation, a qualified marine archaeologist shall complete an analysis of available side scan sonar ~~and magnetometer~~ data for the cable route between the ~~shoreline and the~~ 328 ft. (100 m) and 6,000 ft. (1830 m) water depth. The analysis shall identify and analyze all ~~magnetic and~~ side scan sonar anomalies that occur in a 0.6 mile (1.0 km) wide corridor centered on the proposed cable route. The results of that report to the CSLC for approval prior to the pre-lay grapnel run and cable installation.

MMCR-4b: **Reroute Cable As Needed:** Should a previously unknown shipwreck of potential cultural resource value be discovered within the proposed cable-corridor as a result of the study required in ~~CR-6a~~ CR-4a, the proposed cable route or installation procedures shall be modified to avoid the potentially significant cultural resource.

In addition, implement MM-MARBIO-8b: Spill Response and Recovery Plan.

SECTION 4.7: HYDROLOGY AND WATER QUALITY

The following text was modified on page 4.7-13 to include the County requirement for submittal of an Erosion and Sedimentation Control Plan, the necessity for a Storm Water Pollution Prevention Plan, and the necessity of testing flushing water used to clear the existing drill pipe. Lastly, Table 4.7-3 was updated to reflect the modifications of Mitigation Measure WQ-1:

MM-WQ-1. **Prepare and Implement an Erosion and Sedimentation Control Plan, and a Storm Water Pollution Prevention Plan.** Prior to issuance of construction permits, AT&T shall submit to the CSLC evidence of an approved Erosion and Sedimentation Control Plan (ESCP) as required by the County of San Luis Obispo, and Storm Water Pollution Prevention Plan (SWPPP), if required pursuant to Regional Water Quality Control Board requirements (such as disturbance greater than one acre), covering all aspects of the Project and specifically addressing conditions and measures to be implemented to minimize the effects of erosion and/or a spill of toxic substances. The ESCP and SWPPP should include but not be limited to spill contingency measures, vehicle and equipment maintenance, and any dewatering activities that become necessary in accessing manholes.

MM-WQ-3. **Water Quality Testing and Reporting for Pipe Flushing Water.** If required by the RWQCB, ~~Prior to use~~ AT&T shall conduct chemical analytical testing of the current contents of the bore pipe and any proposed flush water ~~proposed to be utilized for~~ prior to pipe preparation activities to ensure the water quality will not violate Ocean Plan water quality standards. Copies of the water quality analytical testing results shall be submitted to the California State Lands Commission or its environmental monitor and the Regional Water Quality Control Board for review and approval prior to discharge.

In the event that RWQCB does not require such analytical testing, evidence substantiating this determination shall be submitted to the CSLC prior to the pipe preparation activities.

Table 4.7-3. Summary of Hydrology and Water Quality Impacts and Mitigation Measures

Impact	Mitigation Measures
WQ-1: Erosion and sedimentation impacts during construction activities	**WQ-1:** Prepare and implement an erosion and sedimentation control plan, and a storm water pollution prevention plan. Implement **MM TERBIO-2e** Spill Prevention and Contingency Plan, and **MM TERBIO-3c** Erosion control monitoring.
WQ-2: Effects of a petroleum discharge during construction activities	**WQ-2:** Prepare spill response and recovery plan.
WQ-3: Discharge of contaminated water during pipe preparation activities	**WQ-3:** Water quality testing and reporting for pipe flushing water or evidence that the RWQCB does not require such testing and reporting.

SECTION 4.8: LAND USE AND RECREATION

The following text was modified on page 4.8-1 to include applicable County of San Luis Obispo Conditions of Approval from the WorldCom Development Plan/Coastal Development Permit project. MM REC-1a on page 4.8-16 has been modified to address CDPR comments regarding recreation impacts within Montaña de Oro State Park:

This section evaluates the compatibility of the proposed Project's activities with adjacent or surrounding land uses, including recreational resources of the area. This section also evaluates the Project's consistency with applicable plans and policies adopted by agencies with jurisdiction over the Project area. Policy consistency review will be focused on the offshore and nearshore components since the proposed Project involves existing onshore conduits, the use of which has been previously approved by the County of San Luis Obispo. A copy of the original Plan and Policy Consistency analysis prepared by the county, as well as the Conditions of Approval, are provided in Appendix J of the DEIR. In addition, the WorldCom Development Plan/Coastal Development Permit (D970257D) conditions of approval will apply to the shore-end subsurface conduit. A copy of the conditions of approval have been included as Appendix E of this Final EIR. Installation of the onshore segment of the proposed fiber optic cable will require compliance with these Conditions of Approval.

Mitigation Measure for REC-1: Loss of Recreational Use Parking at the Sandspit Beach Parking Lot

MM REC-1a. **Notifying the California Department of Parks and Recreation.** Prior to cable installation, AT&T shall submit a plan and obtain approval of such plan from the California Department of Parks and Recreation (CDPR) for the scheduling and locating of Project activities at the Sandspit Beach parking lot, access routes, and staging areas along the Ridge Conduit system within State Parks land, incorporating measures to ensure the availability of offsite parking, restrooms, fire prevention and spill prevention/control measures, and pedestrian access to the beach during Project activities. AT&T shall submit documentation of the approval to the Executive Officer of the California State Lands Commission (CSLC) prior to Project initiation.

SECTION 4.10: NOISE

The text on page 4.10-8 was modified to reflect comments regarding noise impacts on marine mammals as submitted during the DEIR public review by the National Oceanic and Atmospheric Administration.

MM-NOI-1. **Marine Wildlife Contingency Plan.** A ~~m~~Marine ~~w~~Wildlife ~~c~~Contingency ~~p~~Plan (Plan) for the pre- and post-lay surveys and cable lay operations ~~and post-lay surveys~~ shall be prepared ~~that~~ and will include measures to reduce the chance of noise-related impacts to marine mammals within the area most likely to support the most common cetaceans. That ~~p~~Plan shall include the provision for an appropriate number of NOAA Fisheries-approved marine mammal monitors to be onboard the cable lay, cable burial and ~~support~~ transport vessel~~s~~ for complete daytime observations during marine construction activities within 50 miles (80 km) of the shore. The Plan will also include a specified distance from the vessels within which the 160 dB re: 1 μPa_{RMS} noise level is expected to occur and will discuss the actions that the onboard marine wildlife observers will institute, including but not limited to temporary cessation of activities, if a marine mammal or reptile is showing noise-related behavioral changes within that safety zone. The Plan will be reviewed and approved by NOAA Fisheries prior to the initiation of in-water activities. Such Approval shall be submitted to the CSLC. (See MM MARBIO-4 for additional Plan requirements.)

SECTION 8.0: MITIGATION MONITORING PROGRAM

The text below of the Mitigation Monitoring Program has been revised to reflect changes in mitigation measures as identified above.

Table 8-4.2. Mitigation Monitoring Program - Air Quality

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
AQ-1: Vessels used for construction and decommissioning could temporarily exceed daily emission thresholds for ozone precursors within the APCD.	• **NOx Control Measures and CBACT.** The proposed project shall implement Best Available Control Technology for all emissions exceeding 2.5 tons per quarter. These measures include but are not limited to the following standard construction equipment mitigation measures: • Maintain all construction equipment in proper tune according to manufacturer's specifications. • Fuel all off-road and portable diesel powered equipment, with ARB certified motor vehicle diesel fuel (non-taxed version suitable for use off-road). • Maximize to the extent feasible, the use of diesel construction equipment meeting the ARB's Tier 2 or newer certification standard for off-road heavy-duty diesel engines. • Maximize to the extent feasible, the use of on-road heavy duty equipment and trucks that meet the ARB's 2007 or newer certification standard for on road heavy duty diesel engines. • All on and off-road diesel equipment shall not be allowed to idle for more than 5 minutes. Signs shall be posted in the designated queuing areas and or job sites to remind drivers and operators of the 5 minute idling limit.	Entire alignment	Construction vehicle compliance	Exhaust emissions are minimized	San Luis Obispo County APCD	During construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	The following additional measures shall be utilized to address the requirement for CBACT • Install diesel oxidation catalysts (DOC), catalyzed diesel particulate filters (CDPF) or other District approved emission reduction retrofit devices. • Low-Emission Fuel. Low-sulfur diesel fuel shall be used in all smaller diesel-powered vessels and in all construction equipment.					
	AQ-1b: Offsite NO_X Mitigation. As determined by the San Luis Obispo County APCD, AT&T shall financially contribute to an off-site emission reduction program within the APCD jurisdiction for emissions exceeding 6 tons per quarter. The amount of the contribution shall be agreed upon by the APCD taking into account the limited duration of cable-laying activities. A description of the emission reduction program and a copy of a receipt for funds committed to the program shall be submitted to the APCD at least two months prior to operation of the cable.	Entire alignment	Compliance reporting.	Exhaust emissions mitigation.	San Luis Obispo County APCD	During construction
AQ-2: The Proposed Project would produce greenhouse gas emissions and contribute to climate change.	**MM AQ-2:** ~~The Applicant shall participate in a Carbon Offsets Program and will purchase carbon offsets equivalent to the projected project's GHG emissions to achieve a net zero increase in GHG emissions during the construction phase.~~ Prior to the start of construction, the applicant shall purchase carbon offsets from the California Climate Action Registry (CCAR) or the San Luis Obispo County Air Pollution Control District (APCD). The applicant may also use offsets or credits from any source that is approved by the Executive Officer and is consistent with the policies and guidelines of the California Global Warming Solutions Act of 2006 (AB 32). Within 60 days of completing construction, the applicant shall submit a report for Executive Officer review and approval that identifies all construction-	Entire alignment	Compliance reporting.	Exhaust emissions mitigation.	San Luis Obispo County APCD	During construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	related emissions and the offsets that were purchased from approved programs that results in a zero net increase in air emissions from project construction.					

Table 8-4.3. Mitigation Monitoring Program - Biological Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
TERBIO-1: Cable installation activities could adversely affect nesting activities of protected migratory birds and raptors.	**TERBIO-Previous MM:** Construction activity would not take place within 0.5-mile (0.8-km) of identified raptor nesting areas during the period of February 1 through July 15.	Terrestrial segment	Compliance monitoring	Consistent with requirements stipulated by resource agencies. Confirmation by Environmental Monitor.	SLOCP	During construction
	TERBIO-1a: Initial vegetation removal shall be conducted prior to, or after, the typical migratory bird nesting season (March 1 through August 1) to avoid any potential impact to migratory bird nesting activity. Therefore, initial vegetation clearing and tree trimming along the alignments should be conducted between the months of August and February.	Terrestrial segment	Pre-construction survey	Consistent with requirements stipulated by resource agencies. Confirmation by Environmental Monitor.	USFWS / CDFG	During construction
	TERBIO-1b: If MM TERBIO-1a. is infeasible, pre-construction surveys shall be conducted prior to any vegetation removal to identify any potential bird nesting activity, and: • If active nest sites of bird species protected under the Migratory Bird Treaty Act are observed within the vicinity of the Project site, then the Project shall be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young; • If active nest sites of bird species of special concern (e.g., loggerhead shrike, California horned lark, etc.) are observed within the vicinity of the Project site, then CDFG shall be contacted to establish the appropriate buffer around the nest site. Construction activities in the buffer zone shall be prohibited until the young have fledged the nest and achieved independence; and,	Terrestrial segment	Pre-construction surveys and monitoring	Consistent with requirements stipulated by resource agencies. Confirmation by Environmental Monitor	CSLC/ SLOCP/ USFWS / CDFG	Prior to and during construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	• Active nests shall be documented by a qualified biologist and a letter-report shall be submitted to the State Lands Commission (Lead Agency), County and to the USFWS and CDFG, documenting Project compliance with the MBTA and applicable Project mitigation measures.					
TERBIO-2: Construction activities could potentially adversely affect special-status plant and wildlife species occurring in the Project area.	**TERBIO-2:** Previous Mitigation Measure from 1991 County Coastal Development Permit (D900110D): **Mitigation Monitoring** *1. Prior to commencing construction of each phase the Applicant shall retain a mitigation monitor approved by the County Environmental Coordinator. The mitigation monitor shall submit a monitoring Plan to the Environmental Coordinator prior to construction for review and approval* ***Staking of Disturbance Areas*** *2. Prior to commencing construction activities or any clearing in preparation for construction staging, for each phase, the Applicant shall stake with lath and flag all areas proposed for disturbance to construction control lines. Any disturbance outside of these areas shall be prohibited and construction crews shall be so informed.* ***Clearance and Inspection*** *3. Prior to commencing construction activities or any clearing in preparation for construction staging, the Applicant shall obtain a letter of release from the County Environmental Coordinator after field inspection of construction control staking by the Environmental Coordinator, State Parks and the mitigation monitor.*	Terrestrial segment	Pre-construction activities and Compliance monitoring	Consistent with requirements stipulated by resource agencies. Confirmation by Environmental Monitor.	SLOCP / USFWS / CDFG / NOAA	Prior to and during construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	Mitigation Measures included in the Project by AT&T ***Access and Transportation*** *4. When providing access to fiber optic cable right of way, the stream and any washes would be crossed at existing roads or bridges. Any construction activity in a perennial stream would be prohibited unless specifically allowed by the appropriate agency official or the California Department of Fish and Game Enforcement Representative. All stream channels and washes would be returned to their natural state. California Department of Fish and Game stream alteration agreement Section 1601 and 1603 permits would control and stipulate construction procedures at stream crossings in California. All streams would be crossed between June 1 and October 15, except where prior written permission has been granted by the state and federal representatives.* ***Clearing and Site Preparation*** *5. Sidehill cuts would be kept to a minimum to ensure resource protection and a safe and stable plan for efficient equipment use. The appropriate agency official (i.e., County and/or County compliance monitor) would provide assistance and would approve sidehill cuts prior to construction.* *6. Existing ground cover such as grasses, leaves, brush, and tree trimmings would be cleared and piled only to the extent necessary. Slash and limbs would be disposed of as directed by the appropriate agency official (i.e., County and/or County compliance monitor).*					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	7. Trees and shrubs on the right of way that are not cleared would be protected from damage during construction. The bulldozers would maintain their blade in a raised position except at areas designated for clearing, such as bore pits, manholes, splice boxes and washes. *8. AT&T would trim all woody vegetation in preference to cutting and would cut all woody vegetation in preference to bulldozing.* ***Safety/Health*** *9. Care would be taken to avoid lubricant and fuel spills and other types of pollution in all areas including streams and other water bodies and in their immediate drainage areas. All spills and trash would be cleaned up immediately.* *10. Engine oil changed would be contained in suitable containers and disposed of as refuse.* *11. Construction equipment would not be refueled or serviced within stream channels.* *12. Garbage and other refuse would be disposed of in an authorized disposal site or landfill.* *13. Construction sites would be maintained in a sanitary condition at all times; waste materials at those sites would be disposed of promptly at an appropriate waste disposal site. "Waste" means all discarded matter including human waste, trash, garbage, refuse, oil drums, petroleum products, ashes, and equipment.*					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	Threatened or Endangered Plants and Animals *14. Field surveys would be conducted for state and federal listed species potentially present along the route. Where appropriate and necessary, site-specific mitigation would be developed and approved by the land management agencies, U.S. Fish and Wildlife Service, and California Department of Fish and Game. Field work for identification of plant species would be done before construction and would be scheduled to coincide with known flowering periods and/or during periods of phenological development necessary to identify the plant species of concern.* ***Stream Crossings, Wetlands, and Fisheries*** *15. Where the right of way crosses steams, the banks would be stabilized to prevent erosion. Construction techniques would minimize damage to shorelines, recreational areas, and fish and wildlife habitat.* *16. During construction activities near streams, sedimentation (detention) basins and/or straw bale or fabric filters will be constructed to prevent suspended sediments from reaching downstream watercourses or lakes, as required by the California Department of Fish and Game.* *17. Disturbance to riparian vegetation and wetlands would be minimized by avoidance where possible. Approaches to streams would require selective clearing of vegetation subject to California Fish and Game authorization. No mature riparian trees would be removed.*					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	General Mitigation Measures Applying to All Routes and Improvements					
	18. Prior to commencement of construction activities, the Applicant shall be required to clearly mark all of the trees to be removed during construction as well as any trees that will be trimmed. In the case of manzanita, the marking can be accomplished by stringing colored surveyors tape to denote the areas where plants will be affected.					
	19. Any oak trees, or manzanita that are within ten feet of an area to be graded, not including those to be removed shall be temporarily marked for protection (e.g., flagged with a different color surveyors tape). The purpose of the marking is to act as a reminder to the construction crew that these areas are not to be disturbed during grading. Marking shall be completed prior to commencement of any grading operations within the affected segment of the line (e.g., the rim trail).					
	SLO Junction to Clark Valley Road					
	20. In areas of coastal scrub and Arroyo de la Cruz manzanita, the route shall follow existing roads or trails as closely as possible to reduce vegetation removal. Revegetation shall be with fast growing herbs and shall include shrubs native to the local coastal scrub community.					
	21. In areas of chaparral, construction shall follow the existing road, and disturb the vegetation along the side as little as possible.					
	Clark Valley Road to Los Osos Creek					
	22. The existing road west of Clark Valley Road shall be followed where feasible to avoid the oaks and shrubs.					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	23. All Morro manzanitas along the route shall be flagged and avoided where possible. ***0.2-Mile West of the Eastern Boundary of Montaña de Oro State park to Hazard Canyon Road*** *24. Where the Rim Trail is wide, no brush removal should be required and significant disruption to the root systems can be avoided. Trimming of manzanita along the side of the trail may be required but shall be kept to a minimum by following proper pruning procedures.* **General Measures** **MM TERBIO-2a.** Prior to construction, an agency-approved biological monitor shall conduct a worker orientation program that includes information on and emphasizes the presence of all special-status species within the Project site, identification, their habitat requirements, and applicable regulatory policies and provisions regarding their protection, and measures being implemented to avoid and/or minimize impacts for all construction contractors (site supervisors, equipment operators and laborers); **MM TERBIO-2b.** All construction monitoring shall be conducted at a frequency and duration specified by the appropriate regulatory agency(s) (*e.g*., County, CDFG, USFWS, and NOAA Fisheries) in consultation with AT&T. This consultation shall include appropriate Project authorization from the USFWS (*i.e*., approved Incidental Take Permit / Habitat Conservation Plan) relative to impacts to the federally-listed Morro shoulderband snail; **MM TERBIO-2c.** In accordance with resource agency guidance, exclusionary fencing shall be erected at the boundaries of equipment staging areas to preclude equipment and human					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	intrusion into adjacent habitats with emphasis on protection of areas containing special-status species (*i.e.*, coastal dune scrub, annual grassland, *etc.*). The exact location of exclusionary fencing for each staging area shall be determined by an agency-approved biological monitor. The fencing shall remain in place throughout the construction phase of the Project; **MM TERBIO-2d.** At no time shall any night-time operations and/or construction activities be allowed along the terrestrial cable route from manholes 109F to 4.5. Any required night-time equipment lighting within the Montaña de Oro AT&T Parking Lot to facilitate the Shore-End Segment cable pull and/or within the AT&T Cable Station shall be shielded away from adjacent wildlife habitat areas and pointed downward to minimize lighting/glare impacts to wildlife; and, **MM TERBIO-2e.** AT&T or its construction contractor shall prepare and implement a Spill Prevention and Contingency Plan that includes provisions for avoiding and/or minimizing impacts to sensitive onshore habitat areas, wetlands and waterways of the Project area (*i.e.*, Los Osos Creek and associated tributaries) due to spills during Project implementation. Specifically, the plan shall include but not be limited to the following provisions: • All equipment fueling shall be conducted within the designated staging areas of the Project site. At no time shall any equipment fueling be conducted within 50 feet (15 m) of any wetland and/or existing waterway; • An overview of the containment measures to appropriately store and contain all fuels and associated petroleum products during the Project shall be included in the plan. This					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	shall include specific provisions for equipment staging areas, such as the need for drip pans underneath all parked equipment and designated storage areas for fuel dispensing equipment with visqueen lining and secondary containment; and, • A description of the response equipment that will be on-site during construction and exact procedures for responding to any inadvertent spills including miscellaneous fuel and/or lubricant spills from construction equipment and vehicles during operations. Final specifications of the Spill Prevention and Contingency Plan shall be reviewed and approved by the CSLC, County and CDFG prior to project implementation. **Additional Protective Measures for Special-Status Wildlife** **MM TERBIO-2f.** USFWS Authorization. Prior to installation of the terrestrial cable route, AT&T shall provide an approved USFWS Incidental Take Permit and Habitat Conservation Plan or other appropriate authorization that identifies the conservation measures that AT&T agrees to implement to avoid and/or minimize impacts to Morro shoulderband snail during Project operations. ~~The~~ If an Incidental Take Permit/Habitat Conservation Plan is required, it will document methods of relocation of Morro shoulderband snails from work areas and mitigating temporary impacts to Morro shoulderband snail critical habitat elements (i.e., coastal dune scrub). This shall include a letter of agreement from State Parks approving the final provisions of the proposed Morro shoulderband snail mitigation site within Montaña de Oro State Park as illustrated on Figure 4.3-1. All measures of ~~the~~ any Habitat Conservation Plan or other appropriate USFWS authorization					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	specific to the Project shall become Conditions of Approval. **MM TERBIO-2g.** Prior to the disturbance of potentially suitable habitat areas (manholes 109F to 96F and Rim Trail), a USFWS-approved biologist shall survey for, collect, and relocate any Morro shoulderband snails found within the Project area to suitable on-site or off-site habitat areas not planned for disturbance. USFWS authorization shall be required for this activity (*i.e.*, approved Incidental Take Permit / Habitat Conservation Plan). **MM TERBIO-2h.** A CDFG-approved biologist shall conduct pre-construction surveys to determine presence/absence of California horned lizard within and in areas adjacent to chaparral and/or scrub habitats with emphasis from manholes 109F to 82F. Surveys shall only be required during the active period of California horned lizards (generally April through September). If California horned lizards are identified adjacent to and/or within work areas, then hand rakes or an equivalent shall be utilized by biological monitors to scarify the ground surface and encourage the horned lizards (and other wildlife) to vacate the immediate area prior to construction. As necessary, the agency-approved biological monitor shall physically relocate California horned lizard to suitable habitat located outside the construction zone. Exact procedures and protocols for relocation shall be agreed to during pre-project consultation with CDFG; **MM TERBIO-2i.** A USFWS and CDFG-approved biological monitor shall be on-site during all vegetation clearing and periodically monitor the Project site during construction activities to inspect protective fencing, equipment staging areas, and physically relocate/remove any special-status wildlife species entering the construction zone (*i.e.*,					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	Morro shoulderband snail, California horned lizard, *etc*.). All special-status species shall be relocated to suitable habitat located outside the construction zone by a qualified biologist. Exact procedures and protocols for relocation shall be agreed to during pre-Project consultation with USFWS and CDFG; **MM TERBIO-2j.** Los Osos Creek Pre-Activity Surveys. Prior to ~~each required~~ crossing of Los Osos Creek and associated drainages by Project vehicles and equipment <u>each day</u>, a CDFG-approved biologist shall conduct a focused pre-activity survey of the proposed crossing<u>(s)</u> including a buffer of approximately 50 feet (15 m) upstream and downstream of the crossing<u>(s)</u> to determine presence/absence of aquatic and semi-aquatic special-status species including but not limited to steelhead trout, California red-legged frog, southwestern pond turtle, and two-striped garter snake. All special-status species within and/or immediately adjacent to the crossing<u>(s)</u> shall be relocated to suitable habitat located outside the roadway by a qualified biologist. <u>The frequency of special-status species surveys within Los Osos Creek should be increased at the discretion of the approved biologist to account for increased special-status species activity and/or occurrences.</u> Exact procedures and protocols for relocation of species of concern (e.g., southwestern pond turtle, two-striped garter snake, etc.) shall be agreed to during pre-Project consultation with CDFG. At no time shall any federally-listed species (e.g., steelhead trout, California red-legged frog, etc.) be relocated from the crossings without prior authorization from the NMFS and/or USFWS. **MM TERBIO-2k.** During all construction activities, domestic pets shall not be allowed within the construction area to minimize the potential for wildlife harassment.					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
TERBIO-3: The proposed Project has the potential to result in permanent loss and/or long-term degradation and fragmentation of natural habitats including sensitive plant communities, which provide forage, cover, and breeding elements for several wildlife taxa, including special-status species	**TERBIO-3:** Previous Mitigation Measure from 1991 County Coastal Development Permit (D900110D): **General Measures** 1. Standard procedures for the proposed fiber optic cable project would include implementation of erosion control and revegetation measures to ensure that lands disturbed by construction activities would be restored to a stable, productive, and aesthetically acceptable condition. 2. Detailed site-specific restoration and reclamation plans would be developed under the direction of the appropriate agency official. Because the proposed right of way is composed of many types of terrain, soils, water, bedrock, vegetation, land uses, and climatic conditions, AT&T would include sets of techniques and measures tailored to each condition encountered. Site-specific erosion control, re-vegetation, and restoration measures would be implemented under the direction of the appropriate agency official. 3. During construction of the Project, an AT&T representative would provide: a) liaison with the appropriate agency officials; b) expertise to direct applicable restoration procedure when special conditions are encountered without causing construction delays; and c) favorable public relations. 4. General erosion control restoration measures are applicable to the following areas: • seasonal restrictions for construction phases; • right-of-way and site clearing; • plowing, rock sawing. or trenching, and preservation of topsoil;	Entire alignment	Compliance monitoring	Reduces damage to oak trees.	SLOCP / USFWS / CDFG	Before and during construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	• backfilling and grading; • land preparation and cultivation; • revegetation, and; • maintenance and monitoring. 5. Actual construction activities would immediately follow clearing operations. Rehabilitation and revegetation would immediately follow construction operations, especially in areas of soil that are highly susceptible to wind or water erosion and/or in other special areas. 6. AT&T would conduct all activities associated with the Project in a manner that would avoid or minimize degradation of air, land, and water quality. In the construction, operation, maintenance, and abandonment of the Project, AT&T would perform its activities in accordance with applicable air and water quality standards related facility siting standards and related plans of implementation, including but not limited to, the Clean Air Act, as amended (42 USC 1321). 7. All design material and construction, operation, maintenance and termination practices would be in accordance with safe and proven engineering practices. • Specific Resource/Activity Measures • Access and Transportation 8. Design and construction of all temporary, reconstructed, and newly constructed roads would ensure proper drainage, minimize soil erosion, and preserve topsoil. The design would include clearing work, rehabilitation, and use and maintenance agreements associated with transportation needs. 9. Construction-related traffic would be restricted to routes approved by the appropriate agency official. New access					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	roads or cross-country vehicle travel would not be permitted unless prior written approval was given by the appropriate agency official. Temporary roads used by AT&T would be rehabilitated when construction activities were completed, as approved by the appropriate agency official. 10. Where possible, the right of way itself would be used as an access road during the construction period. The Department of Parks and Recreation would require that the access roads paralleling the fiber optic cable be closed and vegetative cover reestablished after construction is completed. 11. As a general rule, no overland access to the right of way would be permitted. When necessary, overland access would be specified in lieu of road construction or reconstruction. 12. All temporary roads would be closed and areas restored without undue delay or maintained as specified in the land use authorizations. 13. All damaged streets would be repaired to the permit requirements of the governing agency (e.g., city or county road or street cut permits), or otherwise to an equal or better condition. **Seasonal Restrictions** 14. During adverse weather conditions, as determined by the Authorized Officer, stop and start orders would be issued to prevent rutting or excessive tracking of soil and deterioration of vegetation in the right of way area.					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	Clearing and Site Preparation 15. Existing ground cover such as grasses, leaves, brush, and tree trimmings would be cleared and piled only to the extent necessary. Slash and limbs would be disposed of as directed by the appropriate agency official. **Rehabilitation and Revegetation** 16. In strongly sloping and steep terrain (greater than 28 percent slope), erosion control structures such as water bars, diversion channels, and terraces would be constructed to divert water away from the fiber optic cable trench and reduce soil erosion along the right of way and other adjoining areas disturbed during construction, as specified and approved. 17. AT&T would dispose of materials unsuitable for backfilling or excess backfill material at approved locations. 18. Temporary work space areas used at stream and highway crossings and other special sites would be restored to approximate preconstruction conditions. 19. Suitable mulches and other soil stabilizing practices would be used on all regraded and topsoiled areas to protect unvegetated soil from wind and water erosion and to improve water absorption. 20. Rock mulches would be used in steep-sloping rock outcrop areas and low precipitation areas to reduce erosion and promote vegetation growth. 21. AT&T would revegetate disturbed areas where necessary, using agreed upon methods suitable for the disturbed locations.					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	22. Seed would be planted by drilling, broadcasting or hydroseeding. 23. Seeding would be done when seasonal or weather conditions are most favorable. 24. Only species adapted to local soil and climatic conditions would be used. Generally these would be native species. However, introduced species may be considered for specific conditions. 25. Seed mixtures would be planted in the amount specified in pounds of pure live seed/acre where necessary. There would be no primary or secondary noxious weeds in the seed mixture. Seed would be tested, and the viability testing of seed would be done in accordance with state laws and within 9 months prior to purchase. Commercial seed would be either certified or registered seed. For drilling, seed would be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling was possible. The seed mixture would be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop to the bottom of the drill and be planted first). AT&T would take appropriate measures to ensure this did not occur. Where drilling is not possible, seed would be broadcast and the area raked or chained to cover the seed. When broadcasting the seed, the pounds per acre would be doubled. The seeding would be repeated until a satisfactory stand was established.					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	• Drilling would be used where topography and soil conditions allow operation of equipment to meet the seeding requirements of the species being planted. • Broadcast seeding would be used for inaccessible or small areas. • Hydroseeding would be done in critical areas. 26. Waterbars may be constructed to: 1) simulate the imaginary contour lines of the slope (ideally with a grade of 0 or 2 percent); 2) drain away from the disturbed area; and 3) begin and end in vegetation or rock whenever possible. 27. AT&T would trim all woody vegetation in preference to cutting and would cut all woody vegetation in preference to bulldozing. 28. The reestablishment of vegetative cover as well as watershed stabilization measures would be scheduled during the ongoing working season and prior to the succeeding winter season. 29. Temporary measures could include the following: • Constructing temporary breakers at proper intervals on slopes and access roads to control runoff whenever applicable; • Installing silt screens as silt barriers in swales, at the base of small slopes, and in other areas subject to sedimentation from low velocity runoff; • Temporarily seeding critical areas such as road cuts and stream banks with an approved grass seed mixture; • Mulching slopes; and, • Protecting drains with barriers.					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	Visual Resources 30. Trees that must be removed would be cut. Trees with trunks outside the 15-foot (4.6 meters) wide area of disturbance would not be cut, but would only have overhanging limbs removed by cutting, with the tree to remain. Limbs which are removed would be cut flush with the tree trunk to avoid leaving unsightly stubs. Trees and shrubs in the right of way that are not cleared would be protected from damage during construction. **Soils and Erosion** 31. Erosion Control East of Pecho Valley Road. Potential increased erosion in the segment underlain by sand east of Pecho Valley Road along Rim Trail shall be controlled by providing waterbars at intervals no greater than 200 feet (61 m). Providing periodic diversion of runoff from the trail will reduce the rate of erosion now occurring along this segment. **Biological Resources** 32. Revegetation Plan. The Applicant shall prepare a revegetation plan for all disturbed areas of the Project. A qualified botanist acceptable to the county and the Department of Parks and Recreation shall review and make recommendations regarding the revegetation plan before implementation. The revegetation plan shall include the following measures: a. General Mitigation Measures applying to all routes and improvements. 1) Any revegetation shall utilize seeds or cuttings collected from adjacent areas;					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	2) As practicable, revegetation shall occur within the same vicinity as the vegetation to be removed. If it is not possible to revegetate in the same vicinity, then the revegetation shall occur at designated locations as stipulated in the revegetation plan. Unless specified, eucalyptus and other non-native species need not be replanted, but shall be replaced with native species as specified in the revegetation plan; 3) Arroyo de la Cruz manzanita, Morro manzanita and coast live oak trees shall be replaced at a ratio of 5:1, with plants established from cuttings or seeds collected from the local population. The revegetation areas for manzanita shall be: (1) in cleared areas adjacent to the right of way or within the right of way if it is not used for maintenance; or (2), in other areas designated by the environmental monitor (such as in areas that have been cleared of eucalyptus, trails to be abandoned or other suitable areas requiring revegetation); 4) The revegetation plan shall include the following: • Species to be replanted and source of seeds and plants to be used; • Location of the revegetation areas; • Timetable for revegetation;					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	• Method of revegetation (such as the size of plants, soil amendments, special techniques needed to ensure successful replanting, etc.); • Irrigation method where needed; • Method to verify that replanting has been successful, and; • The standard county procedures for oak tree preservation shall be included. 5) Prior to commencement of construction activities, the Applicant shall be required to clearly mark all of the trees to be removed during construction as well as any trees that will be trimmed. In the case of manzanita, the marking shall be accomplished by stringing colored surveyors tape to denote the areas where plants will be affected; 6) Any oak trees or manzanita that are within ten feet of an area to be graded, not including those to be removed shall be temporarily marked for protection (e.g., flagged with a different color surveyors tape). The purpose of the marking is to act as a reminder to the construction crew that these areas are not to be disturbed during grading. Marking shall be completed prior to commencement of any grading					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	operations within the affected segment of the line (e.g., the rim trail); 7) During construction, the operation of heavy equipment shall avoid the area within the driplines of oaks. Such equipment shall not be parked under these trees in order to prevent oily residue from leaking into the root zone and to avoid soil compaction in this area; 8) All trenching shall take place outside of the dripline and root zone of all oak trees. Remedial measures ensuring the health of these trees (i.e., pruning to eliminate growth stress) shall also be specified in the revegetation plan. If it is not possible to avoid the driplines of oak trees, the tree shall be considered damaged and shall be replaced as required in item #3 above; 9) The environmental monitor shall record all trees that are impacted by removal cutting and grading. The monitor will be responsible for monitoring the health of the replanted trees until it is determined that they can survive on their own for a minimum period of five years, and; 10) The width of the disturbance necessary for construction shall be kept to a minimum. It should be noted that the applicant shall be required to replace all vegetation removed during					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	construction, specifically with a 5:1 replacement of oak trees and manzanita and revegetation with an appropriate mix of native seeds and plants. If the environmental monitor deems that the width of the disturbance is excessive, work shall cease until it can be determined what the appropriate width should be. AT&T has indicated that the width of disturbance should not exceed 40 feet (12 m) at crossings and in areas of difficult terrain, and would average 30 feet (9 m) along the majority of the line. In areas of sensitive vegetation, it is possible to reduce the width of disturbance to 10 feet (3 m) depending on terrain conditions. b. SLO Junction to Clark Valley Road 1) In areas of coastal scrub and Arroyo de la Cruz manzanita, the route shall follow existing roads or trails as closely as possible to reduce vegetation removal. Revegetation shall be with fast growing herbs and shall include shrubs native to the local coastal scrub community. 2) In areas of chaparral, construction shall follow the existing road, and disturb the vegetation along the side as little as possible. c. Clark Valley Road to Los Osos Creek 1) The existing road west of Clark Valley Road shall be followed where feasible to avoid the oaks and shrubs.					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	2) All Morro manzanitas along the route shall be flagged and avoided where possible. d. Los Osos Creek Crossing 1) Creek and riparian vegetation shall be disrupted as little as possible at the Los Osos Creek Crossing. The area disturbed shall be revegetated with plants native to the riparian zone as listed in the revegetation plan. Arroyo willows should be included. e. Los Osos Creek Crossing to 0.2 mile (0.3 km) West of the Eastern Boundary of Montaña de Oro State Park 1) The alignment shall follow the existing open pathway through the oaks. All disturbance should be as far away from the trunks as possible and outside of the drip line. f. 0.2 mile (0.3 km) West of the Eastern Boundary of Montaña de Oro State Park to Hazard Canyon Road. 1) Where Rim Trail is wide, no brush removal should be required and significant disruption to the root systems can be avoided. Trimming of manzanitas along the side of the trail may be required but shall be kept to a minimum following proper pruning procedures.					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	Additional TERBIO-3. Mitigation Measures: The following mitigation measures are recommended to further reduce or eliminate construction-related impacts to sensitive habitat areas known to occur or with the potential to occur along the terrestrial cable route: **MM TERBIO-3a.** To avoid unnecessary pruning impacts to several oak woodland habitat areas along the right-of-way, the alternative access routes outlined on Figures 4.3-12 and 4.3-13 of the EIR shall be utilized to access manholes 28.5 to 30.5 and 51 during all Project operations. Appropriate use of these alternate access routes would also avoid and/or minimize inadvertent soil compaction impacts to the critical root zones of oak trees at these locations due to temporary access of Project vehicles and equipment. **MM TERBIO-3b.** To further protect and ensure the long-term health of oak woodland habitat throughout the terrestrial cable route ROW, a certified arborist shall be retained by AT&T to perform any necessary trimming of oak tree limbs overhanging equipment access routes. This shall be conducted prior to allowing construction equipment to enter the proposed impact area to avoid and/or minimize the potential for inadvertent damage to oak tree limbs (i.e., equipment, vehicles, etc.). **MM TERBIO-3c.** Trail Enhancement Plan and Erosion Control Monitoring. To ensure that the Rim Trail is remediated to a permanent, sustainable condition as required by CDPR, AT&T shall develop a Trail Enhancement Plan focused on repair and restoration of the trail to current CDPR standards. The Trail Enhancement Plan would be prepared by AT&T for review and approval by CDPR prior to implementation of the project's terrestrial component. To further ensure that all repaired erosion features along the Rim Trail and any					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	newly created erosion areas due to Project implementation are properly stabilized utilizing the erosion and sedimentation control measures outlined above, all repaired areas shall be monitored during the subsequent rainy season. Specifically, the following measures shall be included in the Trail Enhancement Plan and implemented accordingly following project completion: • All erosion repair areas (both minor and major) of the terrestrial cable route right-of-way shall be identified and numbered accordingly and illustrated on a site plan for easy reference; • The stabilized erosion features shall be monitored for overall effectiveness during three significant storm events (>1-inch [2.5 cm] rain in a 24-hour period) during the pending subsequent season; • Any erosion control deficiencies including, but not limited to rills, gullies, waterbar(s) failure, and localized slope failures shall be identified and appropriate corrective actions using the measures outlined above shall be discussed in a monitoring report; • Copies of the monitoring report shall be provided to the appropriate regulatory agencies, landowner representatives and AT&T within 48 hours of erosion feature documentation; • Recommended measures within the report shall then be implemented within 72 hours by an AT&T on-call contractor; and, • Any areas requiring repair will be monitored using these same protocols the following rainy season.					

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	MM TERBIO-3d: Pre-construction Equipment Washing, Right-of Way Survey and Weed Control Measures: Any construction equipment to be used on the project originating from locations outside of San Luis Obispo County shall be power washed prior to transport to the County to remove any plant material that could be transferred to soils in the project construction area. Prior to construction, the applicant shall coordinate with the San Luis Obispo County Agricultural Commissioner's Office to conduct a pre-construction right-of-way site evaluation for noxious weeds. Based upon the survey, the applicant shall prepare a map showing areas of noxious weed infestation. The applicant shall implement equipment wash stations and other pertinent noxious weed control measures as determined appropriate and necessary based upon the above map and further coordination with the San Luis Obispo County Agricultural Commissioner's Office.					
MARBIO-1: Potential Rock Substrate Disturbance During Pre-Lay Grapnel Survey.	**MM MARBIO-1. Pre-Survey Map.** The CSLC shall be provided with a grapnel survey plan that includes a figure that depicts the areas where the grapnel will be deployed and, within those areas of the marine segment that have rocky seafloor substrate, delineates where the grapnel will not be used.	Marine segment	Pre-construction activity	Reduce hard bottom habitat impacts.	CSLC	Prior to construction
MARBIO-2: Potential Impacts to Rock Substrate During Vessel Anchoring and Nearshore Cable Placement	**MM MARBIO-2a.** Prior to anchoring any vessels, prepare, and have CSLC approve, a detailed anchor plan that shows all proposed anchor locations. Complete a side scan sonar or diver survey within a 100 foot- (31 m) diameter area around all proposed anchor locations and within a 20 foot- (6 m) wide corridor along all proposed anchor line alignments within those areas that have not been similarly surveyed within the past year or where rocky habitat has been previously recorded.	Marine segment	Pre-construction activity	Reduce rock substrate impacts.	CSLC	Prior to construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	MM MARBIO-2b. Cable Placement Area Clearance. Minimize the area of seafloor that is affected during inshore cable placement and avoid all previously-documented rocky seafloor habitats by at least 50 feet (15 m). ~~To assure that no nearshore rocky substrate is affected, the shore-end cable shall be placed onto sedimentary seafloor. Prior to insertion of the cable, CSLC shall be provided with a figure that depicts seafloor habitat types and bathymetry and the location on the seafloor that the shore-end cable will be placed.~~	Marine segment	Pre-construction activity	Reduce rock substrate impacts.	CSLC	Prior to construction
MARBIO-3: Damage to Rock Substrate During Cable Laying	**MM MARBIO-3. Post-Lay ROV Survey, Report, and Compensation Determination.** ~~A CSLC-approved marine biologist shall be onboard the post-lay ROV survey vessel to observe and record the effects of~~ Good quality video footage of the seafloor taken by the ROV during cable lay operations within the "subcropping rock" and "outcropping rock" areas specified in Table 4.6-1 (see below) and within a 100 m-long buffer zone inshore and offshore of each segment will be provided to a California State Lands Commission- (CSLC-) approved marine biologist for review and assessment. ~~on the seafloor substrates and biota in water depths of from 100 to 6,000 feet (31 and 1,830 m)~~. The CSLC-approved marine biologist shall prepare ~~A~~ a technical report that includes information on the area (in square meters) and estimated number and species of organisms affected in rocky habitats, ~~shall be prepared and submitted~~ and shall submit the report to the CSLC. ~~Restoration specifications shall be based on the results of that survey and specified by the CSLC.~~ The applicant shall contribute to a CSLC/CCC-approved hardbottom mitigation program proportional to impacts documented in the survey report.	Marine segment	Post-construction survey and reporting	Mitigate impacts to hard bottom habitat from cable laying activities.	CSLC	Post construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
MARBIO-4: Marine Mammal Interaction with Cable Lay, Cable Burial and Support Vessels	**MM MARBIO-4.** A ~~m~~Marine ~~w~~Wildlife ~~c~~Contingency ~~p~~Plan (Plan) for the pre- and post-lay surveys and cable lay ~~and post-lay surveys~~ operations shall be prepared ~~that~~ and will include measures to reduce the chance of vessel/marine mammal interactions within the area most likely to support the most common cetaceans. That ~~p~~Plan shall include the provision for the appropriate number of NOAA Fisheries-approved marine mammal monitors to be onboard vessels that could cause an impact to marine mammals including the cable lay, cable burial and ~~support~~ transport vessel~~s~~ for complete daytime observations during marine construction activities within 50 miles (80 km) of the shore. The Plan will also include notification procedures and lists of the federal and state agency staff to be contacted in the event of a marine mammal strike. The Plan will be reviewed and approved by NOAA Fisheries prior to the initiation of in-water activities. (See MM NOI-1 for additional Plan requirements).	Marine segment	Compliance monitoring	Reduce impacts to marine mammals during cable laying activities.	NOAA	Before and During construction
MARBIO-5: Incidental and Accidental Vessel Discharges	**MM-MARBIO-5a. Zero Discharge Policy**. A zero-discharge policy shall be adopted for all Project vessels; no fluids shall be discharged into the marine waters shoreward of the ~~mile-limit specified by U.S. and State of California regulations.~~ 6,000-foot water depth.	Marine segment	Compliance monitoring	Reduces damage to marine environment.	CSLC	During construction
	MARBIO-5b: An oil spill response and recovery plan shall be prepared. When in California waters and as required by OSPR and OPA-90 regulations, sufficient onboard oil recovery equipment to respond to a specified oil spill shall be maintained. If required, contract arrangements with spill response organizations shall be established and maintained that can respond to an oil spill with the appropriate equipment and within the regulation-specified period.	Marine segment	Pre-construction activity	Reduces possible damage to marine environment.	CDFG-OSPR / USCG / CSLC	Prior to construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
MARBIO- 6: Damage to Rock Substrate During Maintenance and Repairs.	**MM-MARBIO-6:** Prior to initiation of in-water activities, an anchoring plan for all vessels involved in maintenance, repair, and/or abandonment/removal activities shall be submitted to CSLC for approval. If necessary, an anchor-area clearance survey, similar to that recommended in Mitigation Measure MB-2a above, shall be completed.	Marine segment	Compliance monitoring	Reduces damage during maintenance activities.	CSLC	Prior to construction

Table 8-4.5. Mitigation Monitoring Program - Cultural Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
CR-1: Certain areas of the Project corridor pass through landscapes known to contain abundant cultural resources (*e.g.* Los Osos).	**CR-1a: Cultural Resource Monitoring Plan.** Prior to issuance of construction permits, AT&T will prepare and submit a cultural resources monitoring plan to CSLC, State Parks, and the San Luis Obispo County Department of Planning and Building/Environmental Coordinator. The plan shall be prepared by a qualified archaeologist that is approved by the CSLC, State Parks, and the county. The plan shall address, but not be limited to, monitoring, physical monitoring boundaries (e.g., 100-feet (31 m) each side of a site), site security, protocol for notifying local authorities (i.e. Sheriff	Terrestrial segment	Compliance documentation	Consistent with requirements stipulated by resource agencies. Confirmation by Environmental Monitor.	CSLC / SLOCP	Prior to construction
	CR-1b: A pre-construction meeting shall be conducted by a qualified archaeologist to advise the construction crew of conditions to be aware of that may indicate the presence of a significant archaeological site.	Terrestrial segment	Compliance meeting	Reduce possible damage to cultural resources.	CSLC	Prior to construction
	CR-1c: During trenching in the Sandspit Beach parking lot, cultural resource monitoring shall be conducted by a qualified archaeologist and Native American monitor familiar with the resource types potentially present in these locations. The qualified archaeologist shall conduct monitoring activities based on a cultural resources monitoring plan. During work at the staging area and in the vicinity of Manhole MH 89 F, cultural resource monitoring will be conducted by a qualified archaeologist and Native American monitor familiar with the resource types potentially present in these locations. The qualified archaeologist shall conduct monitoring activities based on a cultural resources monitoring plan developed for the Project. Prior to commencement of construction activities, the site boundaries will be marked	Terrestrial segment	Compliance monitoring	Reduce possible damage to cultural resources.	CSLC/ Native American Heritage Commission (NAHC)	During construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	with fencing, the present work areas will be examined for cultural remains, and any artifacts present within work areas will be mapped and collected.					
	CR-1d: Any cultural and/or paleontological resources (historical or prehistoric site or object) discovered by AT&T, or any person working on AT&T's behalf, shall be immediately reported to the appropriate agency official. AT&T shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the appropriate agency official. An evaluation of the discovery would be made by the appropriate agency official to determine actions that will be taken to prevent the loss of significant cultural or scientific values.	Terrestrial segment	Reporting of found materials	Reduce damage to cultural resources.	CSLC	During construction
CR-2: The potential exists for archeological resources or human remains to be found at any time during the Project activities.	**CR-2:** If archaeological resources or human remains are discovered during construction, CSLC and the County shall be notified, and work shall be halted within 150 ft (46 m) of the find until it can be evaluated by a qualified professional archaeologist. If the find is determined to be significant, appropriate mitigation measures shall be formulated within 48 hours of discovery, and will be implemented. Human remains must be reported to the Coroner's office. If the human remains are Native American in origin, the Native American Heritage Commission must be notified. A Most Likely Descendant will be appointed by the commission for reburial of the remains.	Terrestrial segment	Compliance monitoring	Reduce possible damage to paleontological and/or cultural resources.	CSLC/ SLOCP/ NAHC	During construction
CR-3: Along areas of the Project corridor there are known cultural resources.	**CR-3:** During construction, the following activities shall be excluded from designated sensitive areas: (1) unnecessary or expansive excavation; (2) staging equipment or machinery on undisturbed or exposed portions of the cultural resource; (3) failure to immediately contain and collect any chemical spills; (4) collection, removal or displacement of any artifacts, ecofacts or other cultural remains; (5) stockpiling of imported soils within the	Terrestrial segment	Map and mark sensitive resources on construction drawings or project maps	Reduce damage to cultural resources.	CSLC	During construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	designated sensitive area; (6) removal of native soils outside a sensitive area.					
CR-4: A highly degraded or deteriorated cultural resource (shipwreck) may occur undetected in the Project area buried within unconsolidated sediments, which could be damaged or destroyed during the pre-lay grapnel run or during the cable burial process.	**CR-4a: Detailed Resource Assessment:** Prior to the pre-lay grapnel run and cable installation, a qualified marine archaeologist shall complete an analysis of available side scan sonar ~~and magnetometer~~ data for the cable route between the ~~shoreline and the~~ 328 ft. (100 m) and 6,000 ft. (1830 m) water depth. The analysis shall identify and analyze all ~~magnetic and~~ side scan sonar anomalies that occur in a 0.6 mile (1.0 km) wide corridor centered on the proposed cable route. The results of that report to the CSLC for approval prior to the pre-lay grapnel run and cable installation.	Marine segment	Review assessment for compliance	Reduce possible damage to unknown shipwrecks.	CSLC	Prior to construction
	CR-4b: Should a previously unknown shipwreck of potential cultural resource value be discovered within the proposed cable corridor as a result of the study required in CR- 6a, the proposed cable route or installation procedures shall be modified to avoid the potentially significant cultural resource.	Marine segment	Compliance monitoring	Reduce possible damage to unknown shipwrecks.	CSLC	During construction
	In addition, implement **MM-MARBIO-5b**: Spill Response and Recovery Plan.					

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Table 8-4.7. Mitigation Monitoring Program - Hydrology and Water Quality

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
WQ-1: Construction during the wet season has the potential to result in potentially significant surface water quality impacts to sensitive water bodies and wetland areas.	**WQ-1: Prepare and Implement an Erosion and Sedimentation Control Plan, and a Storm Water Pollution Prevention Plan.** Prior to issuance of construction permits, AT&T shall submit to the CSLC evidence of an approved Erosion and Sedimentation Control Plan (ESCP) as required by the County of San Luis Obispo, and Storm Water Pollution Prevention Plan (SWPPP), if required pursuant to Regional Water Quality Control Board requirements (such as disturbance greater than one acre), covering all aspects of the Project and specifically addressing conditions and measures to be implemented to minimize the effects of erosion and/or a spill of toxic substances. The ESCP and SWPPP should include but not be limited to spill contingency measures, vehicle and equipment maintenance, and any dewatering activities that become necessary in accessing manholes.	Terrestrial segment	Prepare and review SWPP	Reduce possible damage related to erosion.	RWQCB	Prior to construction
	In addition, implement **MM TERBIO-2e:** Spill Prevention and Contingency Plan, and **MM-TERBIO-3c**: Erosion Control Monitoring.					
WQ-2: A petroleum discharge during construction activities would result in significant impacts to water quality.	**WQ-2 :** Prior to laying any cable, AT&T shall require that the vessel operator prepare and have onboard the lay vessel and other larger construction vessels, an oil spill response plan, approved by the California Office of Spill Prevention and Response, that specifies equipment and actions that will be taken in the event of a petroleum spill.	Terrestrial segment	Prepare plan and review	Reduce effect of a petroleum discharge.	CSLC/ CDFG-OSPR	Prior to construction

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
WQ-3: Discharge of contaminated water during pipe preparation activities would result in significant impacts to water quality.	**WQ-3 : Water Quality Testing and Reporting for Pipe Flushing Water.** If required by the RWQCB, ~~Prior to use~~ AT&T shall conduct chemical analytical testing of the current contents of the bore pipe and any proposed flush water ~~proposed to be utilized for~~ prior to pipe preparation activities to ensure the water quality will not violate Ocean Plan water quality standards. Copies of the water quality analytical testing results shall be submitted to the California State Lands Commission or its environmental monitor and the Regional Water Quality Control Board for review and approval prior to discharge. In the event that RWQCB does not require such analytical testing, evidence substantiating this determination shall be submitted to the CSLC prior to the pipe preparation activities.	Terrestrial segment	Compliance monitoring, and testing	Reduce effect of fresh water discharge.	CSLC/ RWQCB	Prior to construction

Table 8-4.8. Mitigation Monitoring Program - Land Use and Recreation

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
REC-1: The proposed Project could temporarily affect recreational use of the Sandspit Beach parking lot.	**REC-1a: Notifying the California Department of Parks and Recreation.** Prior to cable installation, AT&T shall submit a plan and obtain the approval of such plan from the California Department of Parks and Recreation (CDPR) for the scheduling and locating of Project activities at the Sandspit Beach parking lot, access routes, and staging areas along the Ridge Conduit system within State Parks land, incorporating measures to ensure the availability of offsite parking, restrooms, fire prevention and spill prevention/control measures, and pedestrian access to the beach during Project activities. AT&T shall submit documentation of the approval to the Executive Officer of the California State Lands Commission (CSLC) prior to Project initiation.	Terrestrial segment	Notification of CDPR.	Reduce impacts to recreational resources at Sandspit Parking Lot	CDPR / CSLC	Prior to construction
	REC-1b: Prior to construction within the Sandspit Beach parking lot AT&T shall coordinate with California Department of Parks and Recreation (CDPR) and the County Department of Public Works (CDPW) to provide signage along Pecho Valley Road redirecting visitors to park at one of the other designated parking areas. In addition, AT&T shall post signage in the Sandspit Beach parking area alerting visitors that the lot will be closed or partially closed, the length of time, and the location of alternative parking areas.	Terrestrial segment	Posting of signage.	Public notification.	CDPR / CDPW	Prior to construction

Table 8-4.10. Mitigation Monitoring Program - Noise

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
NOI-1: While vessel-specific noise measurements are not available, it is expected that maximum noise levels will be at or near the NOAA-specified harassment levels only within a short distance of the vessel.	**NOI-1: Marine Wildlife Contingency Plan.** A ~~m~~Marine ~~w~~Wildlife ~~c~~Contingency ~~p~~Plan (Plan) for the pre- and post-lay surveys and cable lay operations ~~and post-lay surveys~~ shall be prepared ~~that~~ and will include measures to reduce the chance of noise-related impacts to marine mammals within the area most likely to support the most common cetaceans. That ~~p~~Plan shall include the provision for an appropriate number of NOAA Fisheries-approved marine mammal monitors to be onboard the cable lay, cable burial and ~~support~~ transport vessel~~s~~ for complete daytime observations during marine construction activities within 50 miles (80 km) of the shore. The Plan will also include a specified distance from the vessels within which the 160 dB re: 1 μPa_{RMS} noise level is expected to occur and will discuss the actions that the onboard marine wildlife observers can institute, including but not limited to temporary cessation of activities, if a marine mammal or reptile is showing noise-related behavioral changes within that safety zone. The Plan will be reviewed and approved by NOAA Fisheries prior to the initiation of in-water activities. Such approval shall be submitted to the CSLC. (See MM MARBIO-4 for additional Plan requirements.)	Marine segment	Compliance monitoring.	Consistent with requirements stipulated by resource agencies.	NOAA	Before and during construction

SECTION 9.0: REPORT PREPARATION SOURCES

Section 9.1: EIR PREPARERS

The revisions below should be made to Section 9.1 EIR Preparers, pages 9-1 and 9-2 to identify individuals involved in the preparation of the Final EIR.

Personnel	Years Experience	Name of Section Worked on
Padre Associates Inc.		
Simon A. Poulter, Principal; B.A. Marine/Aquatic Biology and Physical Geography, Wittenberg University, 1980 M.R.P. Environmental Planning, University of Pennsylvania, 1985	23	Project Description, Alternatives, Land Use/Recreation Final EIR/Responses to Comments
Eric K. Snelling, Senior Project Manager B.S. City and Regional Planning, California Polytechnic State University, San Luis Obispo, 1993	15	Project Description, Alternatives and Cumulative Projects, Environmental Analysis Final EIR/Responses to Comments
Ray de Wit, Senior Marine Scientist/Project Manager B.A. Biological Science (Marine Emphasis), San Jose State University, 1968 M.A. Marine Biology, San Jose State University, 1973	35	Project Description, Biological Resources (offshore), Commercial and Recreational Fishing, Hydrology and Water Quality (offshore), Marine Transportation, Socioeconomic (offshore) Final EIR/Responses to Comments
Brian G. Dugas, Project Manager/Staff Biologist B.S., Natural Resources Management, California Polytechnic University, 1993 Continued Education Towards M.S., Fisheries and Wildlife Management, California Polytechnic State University	12	Biological Resources (onshore) Final EIR/Responses to Comments

Personnel	Years Experience	Name of Section Worked on
Amber Conway, Staff Environmental Planner B.S., Environmental Studies, University California, Santa Barbara, 2008	1	Aesthetic/Visual Resources (onshore, offshore), Cultural Resources (onshore), Land Use and Recreation (onshore, offshore), Noise (onshore), Socioeconomic (onshore), Transportation/circulation
Thea Benson, Staff Biologist B.S., Wildlife Management and Conservation, Humboldt State University, 2004	4	Biological Resources (onshore)
Jennifer Klaib, Marine Biologist B.S., Aquatic Biology, University California Santa Barbara, 2006	3	Biological Resources (offshore), Commercial and Recreational Fishing, Hydrology and Water Quality (offshore), Marine Transportation Final EIR/Responses to Comments
Jessica K. Peak, Staff Biologist B.S. Botany and Environmental Biology, Humboldt State University, 2003	5	Biological Resources (onshore) Final EIR/Responses to Comments
Christine Zimmerman B.S., Geology, California State University Bakersfield, 1995 M.S., Geological Engineering, University of Nevada, Reno, 1997	13	Air Quality (onshore and offshore), System Safety/Risk of Upset (onshore, offshore)
Jennifer Carnine, Project Manager/Environmental Analyst B.A., Environmental Studies, University California Santa Barbara, 2000	7	Environmental Justice
Sarah Gray, Environmental Analyst B.A., Environmental Studies University of California, Santa Cruz, 2007	1	Final EIR/Response to Comments

Personnel	Years Experience	Name of Section Worked on
Donna Hebert, Project Manager/Environmental Scientist A.S., Forest Management Technology, University of Maine, Orono, 1980 B.S., Forestry/Marketing, University of Maine, Orono, 1982 M.A., Environmental Education, California Polytechnic State University, San Luis Obispo, 1989 Certification in Negotiation and Mediation, U.C. Santa Barbara Extension, 2006	21	Final EIR/Response to Comments
Fugro West Inc.		
Phillip J. Hogan, Principal Marine Engineering Geologist B.A., Geology, Princeton University, 1980 M.S., Marine Geology, University of Southern California, 1987 Ph.D., Geology, University of Southern California, 1993	20	Geology, Soils, Faults, Mineral and Paleontological Resources
Macfarlane Archaeological Consultants		
Heather Mcfarlane, Underwater Archaeologist B.A., California State University, Fullerton, 1973 M.A., California State University, Fullerton, 1981	12	Cultural Resources (offshore) Final EIR/Response to Comments
Heritage Discoveries, Inc.		
Thor Conway, Principal Archaeologist B.A., Clarion University, Pennsylvania, 1970 M.A., University of Toronto, Ontario, Canada, 1972 Ph D Candidate, University of Toronto, Ontario, Canada [inactive]	38	Cultural Resources (onshore, offshore)
Mel Willis—Private Consultant (Editing)		
Mel Willis, Senior Environmental Planner M.A., City and Regional Planning and Environmental Science and Management Ph D, Environmental Science and Management, University California Santa Barbara	30	All sections
Lori Cheung- Private Consultant (Editing)	22	All sections
EagleEye Editing, Editor B.A., Environmental Sciences, University of California, Berkeley 1986		

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SECTION 9.2: EIR INFORMATION CONSULTATIONS

The revisions below should be made to Section 9.2 EIR Information Consultations, pages 9-3 to identify additional persons consulted for preparation of this Final EIR.

Dettmer, Alison (personal communication). 2009. California Coastal Commission, Manager of the Energy and Ocean Resources Unit. E-mail to Ray de Wit, Padre Associates, Inc. on January 22, 2009.

Kubiak, Chris (personal communication). 2009. San Luis Obispo Fisheries/Cable Operators Liaison Officer, San Luis Obispo. Telephone conversation with Jennifer Klaib, Padre Associates, Inc. on January 26, 2009.

Lee, Mark (personal communication). 2009. County of San Luis Obispo Department of Agriculture, Agricultural Biologist. Telephone communication with Donna Hebert, Padre Associates, Inc. on January 28, 2009.

SECTION 10.0: REFERENCES

The additions below should be made to Section 10.0 References, pages 10-25 to identify additional references consulted for this Final EIR.

FINALZING ADDENDUM/RESPONSES TO COMMENTS

NEC Alcatel-Lucent Asia-America Gateway, Segment 5, Survey Report, Final Issue, Disc 1 of 2 and Disc 2 of 2, Side Scan Sonar, 16 Jan 2009, EGS Job No. R14107.

AT&T AAG Sonar Mosaic, Near-shore, Disk 1 of 1 Jan. 2009.

APPENDICES

Appendix H, Page H-12, Table H-3, the following text should be added as indicated:

Contact Number	Chart Number	Latitude Longitude	Easting Northing	KP RPL Offset	Magnetometer	Duration	Sidescan Sonar	Water depth (m)	Description	Potential Cultural Resources	Potential impacts
S5-EA-MC075	NU063	35° 19.509' N 120° 53.434' W	14814114.39E 3696493.67N	4128.896 14.5m NE	No information	No information	None	32.26		No	None

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